THE

MEDICAL AND SURGICAL REPORTER.

No. 1411.] PHILADELPHIA, MARCH 15, 1884. [Vol. L.—No. 11.

ORIGINAL DEPARTMENT.

LECTURE.

CLINICAL LECTURE ON DELIRIUM TREMENS.

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Translated by Dr. A. A. Gleason.

(*Continued from page* 291.)

But if delirium tremens has its furies, there exists a much more violent form, in which agitation and foolish volubility take the place of the more dramatic incidents, the picture of which has just been traced.

During his incessant foolish recitals, the patient dreams of his habitual occupations; he believes himself in the saloon with his friends, or, perhaps, in the work-shop surrounded by workmen, he gives his orders, he directs imaginary work, he commands those about him, but without presenting, as in the preceding case, that excessive super-excitation, which resembles acute delirium.

There remains a characteristic which is found in all the forms of alcoholic delirium: it is the possibility of snatching the patient for a moment from his thoughts, and of obtaining from him a clear response to a definite question.

This waking lasts but an instant, but it has a capital importance for the diagnostician. It shows us, in fact, that, like the subject plunged into the *first delirium* of typhoid fever, the patient comes to reason for an instant when he is strongly solicited. A moment after, he falls again into his eternal monologue.

To these psychologic troubles, convulsive accidents are added; we remark the trembling first of all—the importance of which is such, that, by good right, it occupies a place in the definition even of the disease.

The trembling may affect the hands, the superior and inferior members, the tongue, the lips, the muscles of the face; in short, in certain subjects the trembling is generalized. In applying the hand to the forearm, we feel the *subsultus tendinum*, which does not leave the patient a moment's rest.

Among the consequences of these motor disorders, we should note the embarrassment of speech, which may sometimes resemble general paralysis. Note, also, the unsteadiness of step and the impossibility of executing with the hands a slightly complicated motion, such as the act of drinking. All these phenomena are aggravated in an evident manner when the subject makes the least effort.

Among the general troubles which make a part of this procession of symptoms, one of the most striking is the profuse sweating, viscous and fœtid, and often exhaling an alcoholic odor. As a compensatory phenomenon, the urine is scanty and red. Generally, there is constipation. The pupils are habitually contracted, but in certain cases they show a very marked inequality. In certain subjects a typhoid state remains, and sordes form on the tongue, the lips, and the teeth. The pulse is feeble, small, sometimes irregular, and often accelerated. According to Copeland, it may reach a hundred and twenty pulsations.

Amidst all these phenomena the temperature remains low enough; delirium tremens is an essentially apyretic affection, and if there exists a change in temperature, it is mostly in a sense of coldness, principally in the extremities.

There exists, however, a febrile form of delirium tremens to which Prof. Laseque, and more recently M. Magnan, have called attention.

In this form the temperature may be raised to 40° to 41° (Centigrade), and even in some exceptional cases to 43°.

This state is accompanied by dynamic phenomena, and the patient often sinks into coma.

According to foreign authors, the febrile forms of delirium tremens are in reality cases of acute delirium.

However, delirium tremens is recovered from in the majority of cases; its habitual duration is from three to eight days; in exceptional cases it may be prolonged to twenty, or even thirty days. The first phenomenon which announces healing, is the return of sleep.

There remains for us now to speak to you of the diagnosis and prognosis, the anatomical lesions of delirium tremens, and finally of the treatment which may suit it.

Diagnosis. In the presence of a typical case, offering at the same time psychological characteristics and the trembling which characterizes the disease, doubt does not seem admissible—above all, if the antecedents of the patient are known; and nevertheless there are cases where the signs of this disease may be the mark for an absolutely different visceral lesion. We cite principally pneumonia, typhoid fever, and acute meningitis.

Pneumonia, always serious in alcoholics, is one of the most frequent causes of delirium tremens; and what singularly augments the difficulty of diagnosis in such a case, is the absence of the complete signs of the disease. Neither the tenacious expectoration, nor the general prostration, nor the ordinary signs furnished by auscultation, are present to enlighten the physician, who besides cannot, by reason of exciting the patient, make a regular physical exploration.

The complexity of symptoms is then reduced to violent delirium, loquacity, accompanied by fever, sometimes by dyspnœa. However, we understand that by its action on the medulla, and by its elimination through the respiratory organs, alcohol may compromise hæmatosis, and even trammel the respiratory movements.

The diagnosis is often very difficult, even while taking into account the antecedents of the patient; and often it is the autopsy which comes, as a last resort, to adjudge the question.

As to typhoid fever, it is above all by the predominance of the abdominal symptoms that the physician recognizes the disease, which formerly, we know, gave rise to frequent deception.

Acute meningitis gives rise to accidents more clearly localized than those of delirium tremens. Contractions and paralytic affections are seen—occulo-pupillary disorders are present, intense headache, sometimes even vomiting—phenomena which are habitually foreign to acute delirium; it is the imperfect and insidious forms of meningitis whose undecided type leaves the observer in great embarrassment.

It may easily be confounded with delirium tremens. We do not seek to indicate the rules of diagnosis for each case in particular; let it suffice us to say that the antecedents of the patient, and the evolution of the disease, when it is carefully observed will in general allow us to recognize the truth.

There remains for us to speak of the affections which enter more specially into the scope of our studies.

General paralysis in its outset, encephaloid hypochondria, and above all, acute mania, may very often in their initial phases resemble delirium tremens. However, in a like case, we meet with less marked trembling with less profuse sweating, delirium less rich in hallucinations, a less absolute insomnia. All these characteristics are but relative; and we may say in general, that these affections are easily enough distinguishable from delirium tremens when their acuteness is moderated. In extremely grave cases all the elements of the drama are mingled, and it becomes almost impossible to separate the truth.

But, it is acute uræmic delirium which presents the closest analogies to delirium tremens—above all, when this latter is accompanied by fever. The symptoms may then present such a resemblance that it is only by reliance on the cause that the distinction may established.

For the rest, acute delirium is an affection the outlines of which are not yet clearly enough traced to limit its domain with absolute precision.

Prognosis.—Delirium tremens has a grave prognosis. It is estimated that the issue is fatal in a proportion of 15 per 100.

Death comes usually during convulsions or coma. In the adynamic form the patient succumbs to a state of absolute prostration. Finally, certain patients die suddenly amidst the most violent agitation. (Marcé.)

Cure is the rule. It is announced, we have said, by the return of sleep, then by the successive amendment of the principal symptoms.

The agitation diminishes, the disorders of motility are effaced, the general delirium is calmed, and the patient returns gradually to the normal

state, sometimes after a short time, sometimes on the contrary after a prolonged delirium, whose traces remain for a sufficiently long time. There is a third mode of termination, which is met with frequently enough in subjects who present already a predisposition to insanity. Dementia and mental alienation may succeed, either directly or at a period more or less removed from an attack, and above all, after two or three attacks of delirium tremens. Let us add, finally, that relapses augment sensibly the gravity of the prognosis, and that the older the subjects are, the more chronic is their alcoholism, the more their general health is enfeebled, the more also do they find themselves exposed to the serious terminations that we have just indicated. On the contrary, a young man, vigorous and quite well, resists more easily the invasion of the disease, and may support more easily its consequences.

Pathological anatomy does not furnish in respect to this disease very scientific results, when we limit ourselves to the consideration of cases exempt from all complication.

A manifest congestion of the meninges and the cortical substance, a sufficiently characterized œdema of the pia mater, sometimes rudimentary adherences of this membrane with the cortical conches (as in acute delirium)—in short, a despoiled state of the membranes and a sufficiently marked lymphatic stasis—are almost the only lesions that may be attached with certitude to the disease with which we are now occupied.

The other alterations that have been proved—pachymeningitis, encephalitis, the presence of alcohol in the cerebral substance—are common to all forms of alcoholism, and present no particular significance.

Treatment.—The treatment of delirium tremens, about a half century ago, appeared to be admirably simple. Avoid sanguineous depletions, administer opium in large doses; such was the universal rule, and we can not deny the good effects of such treatment, in a great number of cases; but we know to-day that we must establish, in this respect, very narrow categories, and that it is impossible to apply the same medication indiscriminately to all diseases.

And first, when an alcoholic subject falls sick, the physician, if he knows the antecedents, should interdict all depressing treatment; no bleeding, no dieting, and above all no deprivation from alcohol; otherwise, we risk the provocation of an explosion of delirium. We should, on the contrary, tone up the patient and sustain him in as great measure as possible.

But finally, in spite of all precautions, the delirium breaks out; we may then find ourselves in the presence of three very different sorts of subjects.

Let us suppose ourselves called to a patient, young, free from all vascular or cardiac lesions, and showing no elevation of temperature. In such a case, opium is completely indicated; it must be administered in doses of several centigrammes, and we may also have advantageous recourse to subcutaneous injections of morphine.

We may join chloral to this treatment, especially if the agitation is great; finally, the patient must be sustained by the generous administration of wine and various alcoholic drinks. Chloroform and digitalis have both been employed. The first of these two remedies appears to us dangerous. As to the second, it is mainly when there is great feebleness, and an intermittent pulse, that it is indicated. We would never prescribe it in the enormous doses which have been employed in England (twenty-six grammes of the tincture of digitalis in ten hours). That, as we think, is a dangerous game.

Here, now, is a different—very different—case; the patient attacked by delirium tremens presents at the same time a visceral complication—a pneumonia, for example. In this case chloral is absolutely contra-indicated, opium should be administered with prudence; but we must, above all, insist upon tonics and diffusible stimulants, such as the acetate of ammonia; finally, have recourse to digitalis, if the character of the pulse indicates its use.

We must reserve a separate place for febrile delirium tremens, above all when it accompanies an adynamic state.

Narcotics are then formally contra-indicated; we must have recourse to tonics, to stimulants, to alcohol, and to anti-spasmodics, such as ether, camphor, and musk. Certain authors have recommended the acetate of zinc. Our personal experience furnishes us with no knowledge in regard to it.

COMMUNICATIONS.

THE OLEATES IN CUTANEOUS DISEASES.

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Attention was first directed to the existence of oleic acid about 1811, by Chevreul, and some mention of the oleates may be found in the pharmacy

of France of that time. The earliest English paper on the subject was by Attfield, in 1862.* It was not until the paper by Mr. John Marshall† was published, in 1872, that much interest was awakened in the subject. Since that time several communications on the oleates, both as regards their pharmacy and therapeutics, have appeared in the current medical literature.‡

The oleates must be looked upon as valuable additions to our means of treating diseases of the skin, and although they do not answer in all cases, or supplant the older and tried methods of dermic medication, yet they have proven of such value in a number of instances as to warrant their further trial and experimental use.

There are two methods of preparing the oleates, each of which has its advocates. The older method is by the direct combination of oleic acid with the base. The new method is by double decomposition, the oleate of sodium with a neutral metallic salt. Unquestionably the preparations by the latter method are, in appearance at least, superior to the older oleates; in regard to the therapeutical effects, they are also probably better, although excellent results may be secured with the preparations made by the older method. It is highly probable, however, that the method of manufacture by double decomposition will entirely supplant the old process.

Introductory to the consideration of the individual preparations, the following notes on the manufacture of oleic acid and the oleates may prove of interest:

First as to the preparation of oleic acid. One of the best and cheapest methods of preparing it is as follows: The oil of sweet almonds is saponified with the oxide of lead, having an excess of oxide of lead present so as to be sure of complete saponification of the oil. The product so obtained is put in benzin, which dissolves the lead oleate, while the lead palmitate is deposited. The solution of the lead oleate is decanted and shaken with diluted hydrochloric acid (1 to 7); this separates the lead chloride and leaves a benzin solution of oleic acid, which, after the expulsion of the benzin, gives an acid that is well adapted for the manufacture of the oleates. The oleic acid so obtained is of a light-yellow color, readily miscible with 92 per cent. alcohol in all proportions without causing turbidity. (Wolff.)

The oleate of sodium may be obtained by saponifying the acid with caustic soda. A solution of this and a solution of a metallic salt brought together, will give a precipitate of the oleate.

As this method of obtaining the oleates by double decomposition is, however, somewhat expensive, the following method may be employed: One part of castile soap (sodium oleo-palmitate) is dissolved in eight parts of water; this is allowed to stand for twenty-four hours, when there will be a considerable deposit of sodium palmitate. The supernatant liquor containing mostly sodium oleate, is drawn off and decomposed with a concentrated solution of a metallic salt, which, if obtainable, should contain no free acid to prevent the formation of free oleo-palmitic acid. The heavy deposit of oleo-palmitate so derived is strained off, pressed out in the strainer, and the adherent water evaporated over a water-bath; afterwards it is dissolved in about six to eight times its quantity of petroleum benzin, and the insoluble palmitate is left to subside while the solution of the oleate decanted therefrom is filtered off. The benzin evaporated will yield an oleate that is a chemical combination, and one that will remain stable and efficacious. (Wolff.)

The oleates, whether made by the direct combination of the acid with the oxides or by the process of double decomposition, are fixed salts, and the designations of five per cent., ten per cent., etc., oleates, are misnomers, and wholly incorrect. The so-called per cent. oleates are solutions of the oleates in free oleic acid; for example, the so-called ten per cent. oleate of mercury is so named for the reason that ten parts of mercuric oxide are added to ninety parts of oleic acid, and combination allowed to take place. The oxide, however, only requires a certain proportion of the ninety parts of the oleic acid for the production of the oleate, so that there must be a considerable quantity of the acid which is not needed for the combination; in other words, the so-called ten per cent. mercuric oleate (and the same applies to the other per cent. oleates) is a solution of the oleate in free oleic acid.

It will be readily seen that this manner of speaking of the oleates, therefore, is not only misleading, but erroneous, and should be discarded. If a diluted oleate is required for application it may be ordered in the same manner that all dilutions are prescribed—so much of the oleate and so much of the diluent.

It is not my purpose to present in detail the

* Pharmaceutical Journ. and Trans., 1862-3, vol. 4, p. 388.

† Lancet, May 25, 1872, p. 709.

‡ Crocker: Medical Record, 1879, p. 123; Wolff: Amer. Jour. of Pharmacy, Jan., 1879, p. 5; Nov., 1883, p. 445; Shoemaker: Trans. Penna. State Med. Soc., 1879, p. 707; Medical Bulletin, July, 1882, p. 584; Squibb: Ephemeris, No. 6, Nov., 1882, p. 152.

chemistry and pharmacy of each particular oleate, as the foregoing remarks, with the subjoined table, showing the percentage of base in each salt, will give an insight into their mode of manufacture and composition:

Salt.		*Base.*		
Aluminium oleate contains	3.1 %	metallic aluminium equivalent to	17.9 %	aluminium hydrate.
Arsenic oleate "	8.16 %	metallic arsenic "	21.5 %	arsenious acid.
Bismuth oleate "	19.9 %	metallic bismuth "	44.3 %	bismuthyl oxide.
Copper oleate "	10.1 %	metallic copper "	12.8 %	cupric oxide.
Iron oleate "	9.04 %	metallic iron "	11.5 %	ferrous oxide.
Lead oleate "	26.7 %	metallic lead "	29.2 %	plumbous oxide.
Mercury oleate "	26.2 %	metallic mercury "	28.35 %	mercuric oxide.
Quinia oleate "	57.2 %	quinia.		
Silver oleate "	27.6 %	metallic silver "	59.3 %	silver oxide.
Zinc oleate "	10.4 %	metallic zinc "	12.9 %	zinc oxide.

Oleate of Mercury.—In color, yellowish, somewhat adhesive, and of the consistence of ointment, with an oily odor. If pure, diaphanous and of a yellow color, but generally found of a grayish or greenish hue, showing the separation of mercurous oxide and metallic mercury, which will be found ordinarily at the bottom of the vessel containing it.

Applied to the sound skin, this oleate produces more or less redness and irritation, and if its use is continued, may cause a dermatitis. It is rarely prescribed in full strength, but usually one part to from one to three parts of oleic acid or lard. One part of this oleate to two parts of oleic acid will give a preparation about similar in strength to the so-called ten per cent. oleate. Of all the oleates, this is not only the most important, but one that has been long in use.

It has its principal field in the treatment of syphilis by inunction, and when employed for such purpose is efficient and cleanly, completely supplanting the old method of inunction by blue ointment. For this purpose, the oleate should be diluted with oleic acid, lard, or a combination of the two. A prescription made up as follows will answer admirably:

℞. Hydrargyri oleatis, ℥ iij.
Acidi oleici, ℥ ij.
Cerati simplicis, ℥ iij.
Ft. ugt.

A portion of this ointment of the size of the terminal joint of the forefinger suffices for an inunction. For each application a new surface should be selected. As the oleate ointment is more irritating than the old mercurial ointment, and as it is, also, more readily absorbed, less friction should be employed, and the hairy and more delicate portions of the skin should, as far as possible, be avoided.

For all syphilitic eruptions, ulcerative or non-ulcerative, and especially the later and localized manifestations, the local use of an ointment of this oleate is an excellent adjuvant to the constitutional treatment; it should be applied and gently rubbed into each lesion. The ointment given above may be used; ordinarily, an ointment made up of one part of the oleate to four parts of benzoated lard will be found sufficiently active.

Another disease, in some cases of which this oleate seems to act almost as a specific, is chronic ringworm of the scalp. As a rule, it is, I think, more reliable than any other remedy, failing at times in obstinate cases, as do all other remedies, but in the majority of instances curing. In recent cases, a twenty per cent. ointment or solution will be effective; if the disease has existed a long time, a thirty, or even forty per cent. ointment may be employed. It is to be well rubbed in twice daily, and the head to go unwashed for a week or longer. Treatment, if it is to be permanently successful, must be continued for several months. Epilation, as in all other plans of treatment, is to be persistently practiced. A combination which will be found useful in these cases is the following:

℞. Hydrargyri oleatis,
Picis liquidæ, āā ℥ ij.
Ugt. sulphuris, ℥ iv.
Ft. ugt.

It is to be applied morning and evening. As there is a tendency to chemical change, a quantity sufficient for a week or two only should be made at one time.

In all skin diseases in which ointments of red precipitate, white precipitate, and calomel are employed, this oleate, properly weakened, may often be substituted with advantage.

All indurations, swellings, and glandular enlargements, may occasionally be favorably influenced by applications of a mild solution or ointment.

In pediculosis capitis, and more especially in

pediculosis pubis, a twenty-five per cent. ointment of this oleate will often prove curative.

The mercury oleate, in some instances, may be advantageously combined with the other oleates.

Oleate of Zinc.—Dry, white, pulverulent, impalpable powder of a soapy touch, resembling powdered soapstone; if pure, should make a clear solution with oils, lard, etc., over a water-bath. It may be used either as a dusting powder or as an ointment. An ointment of one or two drachms to the ounce of cosmoline or any fatty base is most commonly used. Sometimes the oleate made up in ointment form with oleic acid seems to be more efficacious. A very good way of prescribing it is as follows:

℞. Zinci oleatis,
Acidi oleici, āā ʒj.
Petrolati,
Cerati simplicis, āā ʒiij.
Ft. ugt.

To a great extent this oleate replaces the oxide of zinc, and may be ordered whenever that substance is indicated. Acute vesicular eczema may be successfully treated with the application of black wash and the subsequent application of an ointment of oleate of zinc; the wash is to be applied with a sponge or soft rag for several minutes two or three times daily, after each application has dried, a small quantity of the ointment being gently rubbed over. In some instances, the disease seems to be more favorably influenced by the oleate employed as a dusting powder. When such is indicated, the following will prove an eligible formula:

℞. Pulv. zinci oleatis,
Talci veneti, āā ʒiij.
Amyli, ʒij.
M.

This is to be dusted over the parts several times daily. The same plan of treatment is frequently of advantage in all weeping eczemas. In intertrigo, a dusting powder, such as given above, is very comforting. This oleate makes a harmless toilet powder, and combined with talc and calamine, as in the formula below, will make an excellent powder for such purpose:

℞. Calaminæ præparatæ, ʒij.
Talci veneti,
Zinci oleatis, āā ʒvij.
Olei rosæ, q. s.
M. S.—Toilet powder.

This last may also be employed as a dusting powder in moist eczema and similar inflammations.

Oleate of Lead.—Yellowish-white in color, much resembling lead plaster, but somewhat harder and more brittle. A good ointment is made by melting with an equal part of oleic acid, vaseline, or lard; as such it makes an excellent substitute for Hebra's litharge ointment, and will keep for an indefinite time. It is protective, astringent, and sedative, and may be prescribed whenever such an ointment is called for. In acute and subacute eczema its use is followed at times by rapid improvement. In the more chronic and sluggish forms of the disease, a proportion of oleate of mercury may be added to advantage. In order to secure a rapid and positive effect, the ointment of lead oleate should be kept constantly applied as a plaster, changing twice daily. In abrasions, erysipelas, and similar inflammations, the oleate ointment exerts a prompt and beneficial effect, reducing the inflammation and relieving pain and irritation. In dermatitis venenata an ointment of the oleate, such as mentioned, allays the intense burning, and frequently affords relief. In that troublesome affection of eczema of the nares, where slight fissuring and pustulation take place, it will occasionally be found useful. In sycosis non-parasitica, the following formula will often prove of advantage:

℞. Zinci oleatis,
Bismuthi oleatis, āā ʒj.
Plumbi oleatis, ʒij.
Adipis, ʒiv.
Ft. ugt.

This is to be applied to the parts twice daily, after thorough cleansing with warm water.

In eczema about the anus, this oleate ointment sometimes gives relief. Vesicular eczema of the hands may often be rapidly relieved in the following manner: The parts are to be soaked in hot water for ten minutes, carefully dried with a soft towel, and then are to be covered with pieces of muslin thickly spread with the ointment. The application is to be renewed morning and evening; at each renewal the loose scales, crusts, and epiderm are to be gently rubbed off; no force should be employed, otherwise more harm than good will result. Treatment is to be continued for several days, at the end of which time the hands will be vastly improved. So much accomplished, a small quantity of calomel may be added to the ointment, and instead of applying it in the form of a plaster as before, it should be gently rubbed in two or three times a day. It is well to remark that although the disease is quickly brought into a favorable condition by the plan of treatment just mapped out, the progress thereafter is not so rapid.

Oleate of Bismuth.—Pearly-gray in color, smooth, and of the consistence of ointment, and should show no trace of suspended solids when rubbed

on the skin. This oleate is generally applied full strength, and is indicated in all cutaneous affections in which a soothing ointment is required. It should be gently rubbed over the parts, and the application repeated several times daily. In such diseases as sycosis non-parasitica, dermatitis, etc., this oleate is often productive of great benefit. One of the best soothing ointments that may be prescribed, is the following:

℞. Zinci oleatis,
Bismuthi oleatis, āā ʒ ij.
Ugt. aquæ rosæ, ʒ iv.
Ft. ugt.

This is to be rubbed over the parts or applied spread upon muslin as a plaster. In all cutaneous inflammations, from whatever cause, this oleate proves soothing and healing. In burns and scalds it will often be found of value.

Oleate of Aluminium.—In color, light yellow, of plastic consistence, and somewhat adhesive. For application, it should be melted with an equal part of a fatty base, such as lard or cosmoline. It possesses an astringent action, as well as being somewhat stimulating. It may be prescribed in all skin diseases in which there is much discharge, such as dermatitis, pustular eczema, etc. In the treatment of simple ulcers an ointment of this oleate is frequently productive of improvement. In pustular eczema of children, it is useful, checking the discharge and exerting an alterative action on the diseased skin. An excellent ointment for such cases is the following:

℞. Hydrargyri chlorid. mit., gr. xx.
Aluminii oleatis,
Petrolati, āā ʒ ss.
Ft. ugt.

Oleate of Copper.—In color, dark green, occurring both in the granular and solid forms, and possessing a slightly oily odor. For dermic use it should be melted with from two to six parts of lard, oleic acid or vaseline. Such an ointment is astringent, decidedly stimulating, and more or less destructive to the vegetable parasites. Its principal application has been in the treatment of ringworm of the scalp. A twenty per cent. ointment may be used in this disease, and it should be rubbed in once or twice daily. My experience with it in the treatment of ringworm has not been one that would support its vaunted superiority over other methods; in fact, it has not seemed to possess any merit over a host of remedies which have been long in use, besides possessing the disadvantage of soiling everything with which it comes in contact. It is, for this disease, far inferior to the oleate of mercury ointment already mentioned.

In ulcers an ointment of this oleate will be found to exert a stimulating and healing influence, but the same disadvantage—its color—serves to render its use unpleasant.

Oleate of Iron.—In color, reddish-brown, of plastic consistence, and having a ferruginous and oily odor; making with petroleum benzin a clear reddish solution. Applied to the sound skin it has very little, if any, action. To ulcerated, denuded or discharging surfaces, it has an astringent and stimulating effect. It may be used pure, or better with an equal part of lard or cosmoline. It has been suggested that this oleate be used to impress the general system, in cases in which the internal administration of iron preparations is contra-indicated. To say the least, this action is highly problematical; and even if sufficient iron were absorbed, its color would prove a serious inconvenience to its use for inunction. As yet the utility of this oleate remains to be demonstrated.

Oleate of Arsenic.—In color, reddish-yellow, solid and granular, melting over a water-bath; insoluble in alcohol, but soluble in petroleum benzin, a filtered solution of which, if treated with hydrogen sulphide, will give a yellow precipitate of sulphide of arsenic. It should be melted with from two to six parts of a fatty base for dermic application. In epithelioma and the ulcerations of lupus, it may be found useful. It is, however, in these diseases, inferior to other well-known methods of treatment. In a few cases of psoriasis, its application in the form of an ointment of the strength of one drachm to the half ounce of lard, has appeared of benefit. So far as experience has shown, its use is very limited.

Oleate of Silver.—In color, grayish-brown, pulverulent, and possessing the oleic acid odor. As a powder, it may be dusted over ulcers for its stimulating and alterative effect. It may also be prescribed in ointment form, one drachm of the oleate to the ounce of lard or any fatty base.

Oleate of Quinia.—In color brownish, of plastic consistence, and of a sweet and oily odor. So far, the use of this oleate has been limited to inunction to impress the system at large. For this purpose, it should be mixed with olive oil, lard, or oleic acid. In the past year another use has suggested itself. As is well known, lotions containing quinine have been employed for several years past for the treatment of premature baldness, seborrhœa, etc. Unquestionably the oleate is better adapted for this purpose than any lotion of quinine heretofore employed, and in the few cases in which it has been tried, has seemed to act favorably; and further experience in its use for

these diseases, may corroborate the favorable impression already formed. The ointment which I have employed in the few cases referred to is the following:

℞. Quiniæ oleatis, ʒss.
Adipis benzoat.
Petrolati, āā ʒss.
Ft. ugt.

A small quantity of this ointment is to be rubbed in every evening, or less frequently, as may seem indicated.

In addition to the oleates already named, there are several others which have been employed in cutaneous diseases; but either they have failed to show any therapeutical effect, or experience in their use has been so limited as to make special mention of them at the present time unnecessary; these are the oleates of tin, antimony, nickel, cadmium, etc. The oleates of the alkaloids, morphia, aconitia, veratria, etc., are important, but as their use is confined to other than cutaneous medication, they fall beyond the scope of this paper.

Recapitulating, I may say that of all the oleates so far introduced for the treatment of diseases of the skin, the following may be considered as possessing therapeutic powers which experience has attested: Oleate of mercury, oleate of zinc, oleate of lead, and oleate of bismuth. The other oleates have as yet failed in adequately supporting any attested claim to curative powers; further experience in their use may, however, prove them worthy of a permanent place in dermic therapeutics.

In ordering the oleates, several points are to be kept in mind. If the action of the proposed ointment is to be mainly protective, then the oleate is best made up with one of the paraffinates; if there is to be a certain amount of penetrating power along with a protective influence, then a mixture of lard or oleic acid with a paraffinate is to be prescribed as the base of the oleate ointment; again, if absorption is the main point aimed at, then the oleate compound should be made up of lard, oleic acid, or a combination of the two.

In some cases (and they are by no means few) the oleates are found to disagree; instead of an improvement, a slight or marked aggravation occurs. In not a few instances this may be due to the bad quality of the oleate used; but that it may occur with oleates which are of the best manufacture, is beyond question. Oleates, if properly prepared, will keep almost indefinitely; but if prepared in the old way, with an excess of oleic acid present, they will frequently be found to deteriorate.*

In conclusion, it may be said, as already stated in the first part of the paper, that the oleates are to be considered merely as additional means of treating cutaneous diseases, and are in no sense to be looked upon as panaceas, for often enough they must be discarded to give place to the older and tried methods of dermic medication.

APPARATUS FOR FRACTURE OF THE OS FEMORIS.

BY E. MICHENER, M. D.,
Of Toughkenamon, Chester county, Pa.

Since the publication of my paper on this fracture in the REPORTER, I have received so many applications for further information of my method, that I am willing not only to make that information more accessible, but now, after sixty years' experience in its use, to recommend it as superior to most of the methods usually practiced.

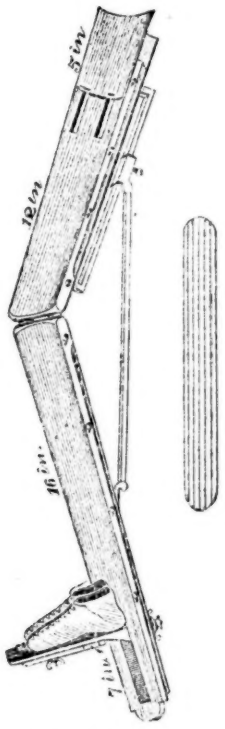
The idea was suggested, in part, by Amesbury's apparatus. The accompanying illustration is so plain as not to need much explanation of either its construction or application.

The major splint is made concave to receive the limb, then cut in two and united by hinges. These are held in position, at any desired angle, by the sliding brace and binding screw. The brass slide, secured by screw-bolts, serves to adapt it to the length of the thigh. At the foot a sliding standard is seen, carrying an adjustable laced shoe. Four brass buttons on each edge of the splint above the knee, and as many below, for the binding straps, and it is completed. These minor splints, from two to three inches wide, conveniently made by gluing narrow strips of light wood on muslin, and long enough to reach from the condyles to the top of the thigh; a bandage of strips made of strong muslin; padding for the splints; and eight pairs of straps of strong, unyielding leather, with buckles, complete the outfit.

After having carefully adjusted the fracture, and waited to see that no retraction takes place, remove the foot-gear, set the splint to the proper angle, and adjust the length of the thigh-piece by the well limb, so as to press against the ischium. Apply a few folds of soft flannel for a pad, and lay down the bandage of strips, or, as I prefer to do, apply the bandage when the fracture is reduced.

*L. Wolff & Co., Philadelphia; Theo. Metcalf & Co., Boston, and Parke, Davis & Co., Detroit, have furnished me with oleates well prepared and of good quality.

If found more convenient, the limb may be laid on the splint straight, and flexed afterward. The minor splints, either padded or rolled in flannel, are next applied, and the leather straps buckled firmly and as tight as the limb will bear. This completes the essential dressing.*



My purpose is to make a permanent, strong, steady, and even pressure on the entire tissue of the thigh, and the thigh only. It effects two important ends: 1. The muscles immediately lose their natural tendency to contract, avoiding both suffering and shortening; 2. It leaves both the hip and knee joint free to respond to any necessary or accidental movement of the patient. The reflex motion is received by the free joints, in place of the more fixed fracture-joint. My success, I believe, has depended upon these factors in the treatment. I have never used mechanical extension, more than what the angular splint may be supposed to afford.

The foot requires little—a stocking and support in or out of the shoe, and the avoidance of under-pressure on the heel.

*In irritable subjects, a bandage from the foot to the knee helps to quiet muscular disturbance.

For children, from infancy up, I have used extemporized splints made by cutting a shingle in two and nailing it on an angular block. This has always given satisfactory results.

The apparatus is equally adapted for injuries of the leg, and readily admits of lateral splints when required.

Hospital Reports.

NEW YORK HOSPITAL.

CLINIC OF PROF. WILLIAM H. DRAPER.

Reported by W. H. Seelye, A. M., M. D.

Constitutional Syphilis.

Patient was admitted November 12; is twenty-five years of age; unmarried. The family history is negative. Five years ago, after a suspicious connection, he says he had a large chancre on the right side of the dorsum of the penis, just beyond the glans. No symptoms of constitutional syphilis followed. Two years ago he had several additional sores on the penis, and the glands of the groin became enlarged; but these were painted over with iodine, and they soon subsided without breaking or suppurating. Three months ago he had a small sore at the meatus, and another about half an inch inside of the urethra. For this he was treated with injections of nitrate of silver, and with various patent remedies. The ulcer within the urethra was painful, but he does not know whether there was any induration about it or not. Two months ago he began to experience violent shooting pains in his joints, which radiated along his limbs. Six weeks ago a profuse pink macular eruption broke out on his chest, abdomen, back, buttocks, and extremities. There have been several similar crops since. He says there was also some eruption two years ago, but these sores were larger, and were elevated, and exuded a fluid which dried upon them and formed scabs. He has had one or two ulcers on the left leg and on the patella, the scars of which are still visible. On admission, his pulse was 75, respiration 18, and temperature 99.4°. There is at present an abundant, copper-colored, papular eruption extending over the face, trunk, and extremities; and on close inspection, numerous small pits or cicatrices are observable.

Gentlemen, in the clinical history of syphilis there are four stages, each marked by peculiar characteristics. There is first a period of incubation, during which there are no symptoms; second is the stage of primary lesions, or the period of the chancre; the next is the stage of secondary lesions, when the general eruption appears; and the fourth is the tertiary period, or the period of gummy growths, and visceral lesions. You noticed in taking this man's history that I was careful to locate accurately the time at which he had his last chancre. And I find that the general eruption, which he now has, appeared at just about the right length of time after the primary lesion, to show that it is a secondary manifestation of the disease. But the particular point of in-

terest in this case is the fact that the man thinks that he has had syphilis before. For he says that he had several sores, and a bubo two years ago. But it is not clear to me now that he has had syphilis before. The theory is, that a person who has had it once can not have it again, that he is protected from further attacks. I do not remember any case recorded of a second attack of syphilis. This man certainly had a sore on the penis, which was regarded as a chancre; but I must admit that I do not think that it was an infective chancre, for the man is now suffering from the secondary eruption of constitutional syphilis. You see, upon a close examination, that there are numerous small depressions on his skin. Now I am willing to assert with great positiveness that these are not the cicatrices of a former syphilitic eruption, but that they are the cicatrices of an acne which has been produced by the use of the iodide or the bromide of potassium. You know that there are certain drugs, which when given in small repeated doses, will produce in many persons a violent form of acne. And following this eruption you get just such cicatrices as these, which indicate that there has been a follicular eruption accompanied by a loss of tissue. We will probably find that this man was formerly treated with potassium iodide for his supposed syphilis, and these follicular cicatrices are the result. I infer, then, that it is pretty sure that this man never had constitutional syphilis, although he had had two chancres, until he contracted the chancre three months ago. So this is a very good case in favor of the theory of the dualists, that there is an infective and a non-infective virus. We can not say that this man was not susceptible to the syphilitic virus, for if this were so, he would have escaped infection from his last sore also. So we must conclude that his former chancres were of a different character from the one which appeared three months ago.

A noticeable and important feature of this last chancre was that it was located within the urethra, and was what is called a concealed urethral chancre. You will often find manifestations of constitutional syphilis in patients who cannot remember that they ever had any primary sore. They may be honest in their statements, but there are cases where the primary ulcer has been deeply seated within the urethra, and it may have caused a urethral discharge resembling that of gonorrhœa, for which they mistake it. And so they do not dream that they have constitutional syphilis until they get the secondary eruption, or perhaps not till they come to the period of gummy growths.

The history of this man's present disease is a classical history of syphilis. There is only one point lacking, and in relation to this he cannot inform us. It is the length of the period of incubation, from the time of the suspicious connection to the appearance of the local sore. This is often difficult to make out, because the patient is unable to individualize the occasion on which he became infected with the virus. But in a great many instances the occasions for exposure to this accident are so rare, that it is easy to determine the length of the period of incubation. The usual period is found to be between two and four weeks, or from eighteen to thirty days, the average being about three weeks. But the chancroid or non-infecting sore has no period of incubation. It may appear the next day, or two or three days after exposure. This is a capital distinction between a true syphilitic and a non-infective sore. Another distinction is that the infecting sore is generally single, while the non-infecting are often multiple. Both may be accompanied by an adenitis, but that due to the infecting sore is not attended by a suppuration of the glands; and it is a general adenitis involving especially the posterior cervical glands, and the chain of glands running down the arms, as well as those in the groins. And many other glands in numerous other places will be found to be enlarged and indurated. But the adenitis of the non-infecting chancroid is a single unique adenitis, due to a localized inflammation, which has extended to the chain of glands in the immediate vicinity of the sores. And here the inflammation is liable to go on to suppuration, which is the converse of what occurs in the generalized adenitis of the unique sore. In this man you can easily appreciate the generalization of the adenitis.

The generalized eruption of the secondary stage usually appears in from one to three months after the appearance of the chancre. And the period of its continuance varies very much. It may be six months, or one or two years. And often a much longer period will elapse before the appearance of the gummy growths characteristic of the tertiary period of syphilis. The characteristic eruption of the secondary period is of the erythematous variety, and it only involves the superficial vascular layer of the derma, and is thus analogous to the eruptions seen in scarlet fever, measles, and other exanthematous fevers. It may occur not only on the integument, but also on the mucous membranes, and it may be accompanied by a slight exudation from the papules, which are sometimes present. For we may get papules as well, and in all degrees. Or the eruption may be purely papular, or purely erythematous. Or it may be but scantily developed, or profusely generalized over the whole surface. As a rule the erythematous element is the more pronounced, however, while the exudation element is inconsiderable. This man has a very marked eruption on his face, which you might mistake for that which is found in German measles or in ordinary measles; and besides there is a little coryza, and irritation about the eyes, which are suffused, as is common in measles also. And when you come to look at the surface of the body generally, there too the eruption is suggestive of measles; for the spots almost disappear under pressure though not entirely, for a slight staining remains. There is also here a slight elevation of the eruption above the surface. But you observe that the eruption here is much more marked upon the back, and it has here a peculiar character which might excite your suspicions of its being of syphilitic origin. That is the fact that it is of a decidedly coppery color. You should not, however, lay too much stress upon the presence of an eruption with a coppery hue. And still another point, which will assist in diagnosing this eruption from that of measles, is the much greater length of time that this persists.

Sometimes the eruption does not occur upon the the face and limbs, but it is confined to the an-

terior surface of the body. And in some patients it may be so insignificant as not to be noticed at all, and so they may not be cognizant of the fact that they have constitutional syphilis.

But it is not only the eruption and the adenitis which indicate the character of this man's disease, but it presents another interesting feature at this period of its development, and that is fever. Though his temperature on admission was only 99.4°, and this morning it was normal, yet I will assume, and I am safe in assuming from the amount of the eruption present and the severity of the pain of which he complained, that he had already had considerable fever before coming here. In many of these cases of constitutional syphilis the period of the generalized eruption which follows the local manifestation of the disease, is ushered in or accompanied by a febrile movement of more or less severity. This is the period of so-called syphilitic fever, and thermometrical observations will generally show its presence. And it manifests itself not merely by elevated temperature and other objective signs, but also by the subjective phenomena of fever, such as headache, pallor of the skin, languor and drowsiness, rheumatoid stiffness, and pain in the bones, emaciation and so forth. These symptoms may extend over a period of several weeks. But sometimes the fever is very acute in its severity and course, and I have known cases with a temperature of 103.5° where the pain was so severe as to require the administration of morphia for its relief. You will sometimes also get the distinct neuralgic affections in these cases, and the fifth cranial nerve is the one most apt to be affected. I have seen a neuralgia of the fifth nerve as acute as you will ever find under any circumstances. All the usual phenomena of this stage are presented by this patient.

I have already spoken once or twice of the analogy which is noticeable in the evolution of constitutional syphilis, to the evolution of certain fevers. And this analogy is so striking that it is worth bearing in mind. The evolution and duration of the different stages of syphilis, however, extend over a greater period of time. As in fevers, so here we have a period of incubation; and then a period of local manifestations, followed by a period of generalized eruption and constitutional symptoms, which lasts for an indefinite period; and lastly, a period of sequelæ, which is the period of tertiary eruptions and gummy growths. The analogy also holds in some other respects. For all persons are not susceptible to the syphilitic poison, which is also true of the contagious fevers. Many individuals are exposed to infection over and over again, but never take the disease, while others succumb upon the first exposure, and then they run through all the periods of the disease in a few months.

Now what is the prognosis in this man's case? Is it necessary that he should pass on into the tertiary period of the disease, sooner or later? This I can not say. He may pass into it, and he may not. The chances are that he will, but this is not certain. Many men go through the entire eruptive period, and then never suffer any more from the disease. But there are many more who do suffer afterwards. Nor can we say how soon the tertiary symptoms will appear after the disappearance of the secondary. It may be in the course of twelve months, or in twelve years, or it may be never. It has been stated by some that a profuse generalized eruption is a more favorable sign than a sparse, or more papular one. But I do not think the truth of this fact has been well enough established as yet, to influence our prognosis.

Now comes the question, how shall we treat this man. In the treatment of constitutional syphilis mercury in some form is now commonly used. Both the mild chloride and the mild iodide have been much employed, as well as metallic mercury itself. Almost every practitioner has his favorite preparation, and mode of administering it. The protoiodide is ordinarily a very excellent preparation. If it produces digestive disturbances, diarrhœa, or colic, this trouble may be corrected by administering with a little opium. And, indeed, this combination is very common. The mercury is administered in the alterative form, in small repeated doses, with the idea of producing its specific effect on the gums. But it should not be carried so far as to ptyalize the patient profusely. However, you will often find great difficulty in ptyalizing a syphilitic patient. For syphilis seems to have a remarkable power of rendering the individual insusceptible to mercury, and so, much larger amounts are required to produce ptyalism than would be necessary ordinarily. The same is true as to the production of the specific effects of iodide of potassium, in tertiary syphilis.

There is another fact, gentlemen, which I wish to impress upon you, as it has so often been impressed upon me in connection with the toleration of drugs in disease. I refer to the fact of the intolerance of alcohol, which syphilis provokes in those who have it. I believe that it is now a well-established fact that a syphilitic patient can not use alcohol in any form without doing himself damage. And you cannot treat constitutional syphilis successfully if you allow the patient to use wine, beer, or spirits at all while he is under treatment. I cannot explain the irritating effect of alcohol on syphilitic patients, any more than I can explain why they can take mercury and iodide of potassium in almost unlimited quantities. The fact in regard to alcohol is however no more strange than that in regard to mercury and iodide of potassinm.

This patient has been treated with the oleate of mercury by inunction. There are numerous methods employed for administering mercury. Such as by vapor, by inunction, by the stomach and by hypodermic injection. All these methods are used by different practitioners, and your choice will usually be made according to your own particular success with some one of them, or your affiliation with the views of some specialist. I have no particular form of administering to advocate. But if the patient can not take it by the mouth, you may give it by inunction. But this is not very practicable in private practice; for you must give special directions as to the place where it is to be rubbed in, and the amount, and the protection of the clothing from staining by the ointment, and so on. The oleate of mercury is a much neater application than the old mercurial ointment. The hypodermic injection is a very good way of producing ptyalism speedily.

Sometimes it may be necessary to give tonics in connection with the specific drugs. But as a rule mercury itself acts as a tonic, and improves the general system remarkably, and so precludes the necessity for iron or quinine or bitters. You will often see an emaciated and chlorosed syphilitic patient, improve at once upon the administration of mercury. You will find nothing more remarkable in the alterative action of drugs, than what is experienced in the treatment of syphilis by small doses of mercury. This is even more effective in improving the general quality of the blood than is iron under similar circumstances.

This patient will be under treatment and observation for a long time yet, and so you will be able to see from week to week the general improvement as it progresses.

Medical Societies.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

(*Continued from page* 302.)

Another curious thing, to be observed in the literature of hydrophobia, is the way in which the madness of the dog is often—one might say usually—deduced from the diagnosis of hydrophobia in the man; instead of the diagnosis of hydrophobia being made to rest upon reliable evidence that the dog was really mad, it is uncommon to find any proof whatever that a dog to which hydrophobia is attributed was rabid, this being, with rare exceptions, a pure assumption. The one phenomenon of a dread of water usually determines the conviction of the physician that he has a case of hydrophobia before him, and settles his opinion of any dog that may ever have bitten the patient, and cannot now be accounted for. Nay more, this mode of reasoning has led certain writers to the assertion that there may be a passing state in dogs in which they may communicate to a human being hydrophobia, but themselves recover. Thus is the struggle to support the specific theory kept up when circumstances seem to be most adverse to it.

Once more, and I am done for this occasion with objections to the anomalies which one meets in examining the basis upon which the general belief in regard to hydrophobia rests. I find in the recorded cases—with very rare exceptions—that, when once hydrophobia is suspected, every phenomenon that occurs during life, every lesion that is found post-mortem, is unhesitatingly set down as a feature of this disorder; and the idea does not seem to be entertained that many of them are grounds of suspicion that some other disorder is present. In this way all lines of distinction between hydrophobia and disorders which simulate it are erased; and it remains for every medical man who is called to a patient who has a dread of water, accompanied with exaltation of reflex excitability, to inquire for a bite or scratch of a dog or cat; if one cannot be drawn out, to assume that it has been received and forgotten; then to make a diagnosis of hydrophobia; after which it is only necessary for the patient to die, to make a complete record. If to this be added a careful microscopical examination of the state of the brain and spinal cord, the observer will have an exact counterpart of the process by which the famous conclusions of certain investigators—often quoted by those who have not taken the pains to go to the evidence upon which they are founded—were arrived at.

This suggests a brief consideration of the pathological lesions of hydrophobia. Notwithstanding all the diligent endeavors made to learn something from the post-mortem examination of the bodies of dogs and men that have died of rabies or hydrophobia, one might to-day adopt the language of Dr. Hart, who declares (*Cooper's Surgical Dictionary*, art. "Hydrophobia") that these examinations afford "little else than a varied mass of symptoms, common to other nervous and blood disorders," and fail to "throw any clear light on the pathology of the disease."

I will not trouble you with the disappointed anticipations of the ancients in this connection: those of modern times are more instructive. The announcement by Hallier, in 1872, of the discovery of a micrococcus which was the germ of hydrophobia, and to which he gave the positive name of "lyssophyton," and the belief of Klebs in the parasitic nature of the granular elements found around the blood-vessels near the scar, have appeared and disappeared within the last decade. The hasty statement of Pasteur that he had obtained from the saliva of a patient dying of rabies a peculiar germ which, when he had cultivated it and inoculated the product, gave rise to a hitherto unknown disease, he was compelled to withdraw almost as soon as he had made it.*

The investigations of Benedikt, Coats, and Gowers, are of the greatest interest in connection with this part of our subject. They are often spoken of as if their results were identical and conclusive; although, in fact, they are neither. Dr. Benedikt published his investigations in 1875, in *Virchow's Archiv*. The text is accompanied with a plate which leaves little room for misunderstanding the author's meaning. The lesions described and figured consist of a perivascular exudation or extravasation (or both) of *red* blood-corpuscles, miliary spots of finely granular degeneration of the brain substance, "miliary abscesses," and melting down of effusions so as to make hyaline bodies alongside of the blood-vessels, often closing their lumen; while the vessels had a pigmented encasement (Pigmenthülle), made up of red blood-corpuscles. These lesions were found in both dogs and men. Dr. Coats published his discoveries in the *Medico-Chirurgical Transactions*, in 1878, accompanied also with plates. His investigations referred to tetanus and hydrophobia. He makes a point of the analogies between these two disorders; and, assuming a virus in hydrophobia, he argues backwards that there is a poison circulating in the blood in tetanus. The lesions he describes in hydrophobia

*Nothing daunted by the experience of others, I observe that Dr. Paul Gibier reported to the Acad. des Sciences, of Paris, on the 11th of June, 1883, that he had found a special organism in the rachidian fluid of animals that had died of rabies, and that the virus could be attenuated by means of cold. Another of the conclusions he announced at that time was that the disease is communicable from mother to fœtus.

consist of a perivascular infiltration with *white* blood-corpuscles.

In comparing these investigations, it is to be noted that the lesions Coats found in tetanus correspond much more closely with those Benedikt found in hydrophobia than do those the former found in his investigations of this latter disorder. Further, it is to be noted that he describes the perivascular infiltrate as consisting of *white* corpuscles, while Benedikt is clear in describing it as made up of *red* corpuscles. Finally, Coats does not consider (though most persons who refer to him speak as if he did) the lesions he found to be distinctive of hydrophobia, but simply evidence of irritation in the blood. Thus we see that these two investigators cannot be regarded as confirming each sther.

Now the association of the name of Dr. Gowers (whose investigations are described and illustrated in the *Transactions of the Pathological Society of London*, vol. xxviii., 1877,) with those of Benedikt and Coats, as having found lesions pathognomonic of hydrophobia, is equally unwarranted, for he distinctly stated in answer to a question, at the meeting where he demonstrated his specimens (*Lancet*, June 9, 1877, p. 840), that his investigation did not lead him to believe there was any special lesion in hydrophobia.

But, inconclusive and conflicting as the results of all these careful investigations have been, it might be easy to see how they might be taken for more than they are worth, if it were not for the fact that they have been formally and categorically vitiated by the subsequent investigations of others. Thus Middleton (*Journal of Anatomy and Physiology*, 1881,) has published the results of microscopical examinations in which he found perivascular aggregations of round-cells in two cases of hydrophobia, corroborating some of the appearances described by Benedikt, but disagreeing with Coats and Kolesnikoff in essential points. But the most striking point of his publication lies in the fact that he found the same morbid appearances which were present in the cases of hydrophobia, in cases of purpura hemorrhagica, diabetes, fracture of the skull, erysipelas, head injury with hæmatoma, concussion of the brain with fracture of the spine, delirium tremens, peritonitis, tubercular meningitis, mental deficiency and excitement, hæmatoma, tetanus, and uræmia. His paper concludes with the distinct avowal that, "As regards the pathology of hydrophobia, it still remains true that nothing characteristic has been observed."

Another investigator, who has gone over this ground, and come to conclusions as destructive as those of Middleton, is Ivanoff, who says (*London Medical Record*, March 15, 1883, from *Vratch*, 1882, No. 15,) that similar appearances to those observed by Benedikt, Gowers, and others, are found in typhoid fever. One of the supposed characteristics, the transparent spaces, he says, were found by Popoff and Stephanoff in uræmia, and by Vinogradoff in intermittent fever, by Danillo in phosphorous poisoning, and by himself and Dr. Czorkov in the brains of healthy dogs. They have no pathological character whatever.

But I need not detain you with further references to more or less famous investigations. I will only add that they all tend to confirm the opinion that as yet no gross or microscopical lesion has been discovered which can be regarded as pathognomonic of rabies or hydrophobia.

And now I must close. I have not said so much because it is any-pleasenter or is likely to be any easier for me than for others to differ from the majority in the branch of science to which my life is given. It is with shrinking that I take a position which, if it is deemed worthy of notice, will be apt to excite opposition, perhaps condemnation. But I have now been engaged for nearly two years in a laborious study of the evidences upon which the general belief in regard to hydrophobia rests, and I have been gradually led to certain convictions different from those with which I started, and which I feel it my duty to make public. One of these is that hydrophobia is not a specific, inoculable disease, derived from the bite of a similarly affected animal. Another is that if we wish to have an accurate, scientific knowledge of what too often actually takes place, and is usually called hydrophobia, we must begin the study of it unprejudiced by the views heretofore generally entertained in regard to it, and with canons of criticism very different from those heretofore deemed sufficient.

I know that these convictions are not novel, and that they have been stated and defended with arguments before. I know, too, that they have heretofore failed to secure the assent of the greatest men who in every generation have adorned the profession of medicine. None the less, however, do I believe them to be true, and that the time will come when they will not be—as they have been in the past—characterized as too absurd to be discussed, or decried as too dangerous to be tolerated.

But, however that may be, a sense of duty compels me to join myself to the small minority whom I think to be on the right side of the question, for truth's sake. Further, in this matter, the interests of science are in an urgent sense the interests of humanity. For this reasen one who feels strongly must speak boldly. This, then, is my apology to those who may think I have erred in opposing the opinion of so many men deservedly honored and respected in our profession.

[After the reading of the preceding paper:—]

Dr. Henry Hartshorne observed, that the author of the paper has given an interesting philosophical analysis of the confusion and uncertainty attaching to much of the evidence concerning hydrophobia.

But when the question occurs as to accepting the conclusion to which he has come, that no specific disease, resulting in man from the bite of the rabid dog, has been proved to exist, Dr. H. H. must necessarily dissent from this, for the best possible reason; namely, direct personal observation.

It had happened to him, early in his practice, to meet with a case, the history of which was known to him from the beginning, The essential facts were these: A boy, eight years of age, was bitten almost in front of the speaker's house, by a dog which, upon usual evidence, was considered to be mad. A day or two afterwards his father brought him to Dr. H. H., and, late as it was, excision of the bitten part was advised; this was, however, not consented to.

About a month afterwards, Dr. H. H. was called to see him. Not proposing to detain the College with all the particulars of the case, which was fully reported in the *American Journal of the Medical Sciences*, it may be said that it was studied without any prepossession or expectation as to what its course would be. Dr. H. H. had not, before that time, become very familiar with the clinical history of the disease. The most striking symptom, which may be considered, in the speaker's present judgment, to be pathognomonic of hydrophobia in man, was an *excessive reflex excitability of the muscles of respiration*. This persisted throughout the case. Not only an effort to drink a fluid, but the sound of running water, any sudden sound, a flash of light, even the puff of air made by moving the hand lightly above the patient's face—every such slight cause would induce a *gasp* of respiration, which gave rise to incessant distress, and made swallowing food or drink impossible. The boy was violently delirious; and this, as well as his age, and the peculiar character of his affection, put quite out of sight any suggestion that a *mental* cause, from horrible anticipation of hydrophobia (such as, no doubt, in several other cases has existed) could influence the case. He died in about a week from the beginning of the attack.

Dr. H. H. also afterwards saw another case; that of a man, under the care of the late Dr. Geo. W. Norris, in one of the surgical wards of the Pennsylvania Hospital. This patient was not delirious. In him also, the reflex inspiratory spasm was clearly marked; although, for a time, he could swallow moistened pellets of bread, or other solids, but no liquids. Along with this, it must be noticed, there was *in neither case* any *etanict muscular rigidity*. The absence of this at once differentiates such cases from tetanus; with which some authors, who have not *seen* instances of hydrophobia, have been inclined to conjecture their identity.

By such observations, confirmed by the records of many others in the literature of hydrophobia (which is not *all* confusion), Dr. H. H. has been obliged to conclude that there *is* a disease *sui generis*, to which that name, though not well chosen, may apply. Attacks do occur in men, after they have been bitten by dogs, which are unlike every other disease; therefore we infer the existence of a *specific* malady. It is, so far (with two or three *doubtful* exceptions only) invariably fatal. It may take place anywhere; even (as Dr. Dulles incidentally said) in Constantinople and Africa, notwithstanding the denial of this by some writers.

Against the horror and certain fatality of such a disease, granting its existence, the precautions now commonly taken are not at all excessive. It would be very unsafe for them to be relaxed, unless a clear case was made out of the actual non-existence of hydrophobia. It would be much to be regretted, therefore, that a conclusion, such as that of the paper just read, should go before the public, in the proceedings of the College, without protest; if, at all events, objection to it rested in other minds as well as in that of the speaker.

Dr. H. Hartshorne, after some further discussion, inquired of Dr. Dulles whether he rejected the opinion that *rabies canina* is inoculable from dog to dog?

Dr. R. P. Harris said: I have met with several cases of hydrophobia, and have been present when the disease was investigated by autopsy. I well remember the case of the boy just reported by Dr. Hartshorne. The youth and sex of the patient, the peculiar symptoms of his malady, and the history of his exposure to canine rabies, gave positive proof of the existence of hydrophobia. My father not having met with a typical case, in an extensive country practice of twenty years, was inclined to doubt the existence of true rabies, until I took him to see this case. Dr. Hartshorne was present, and we examined the patient critically, and with much interest. This was the first case my father had had an opportunity to see, although he had then been in active practice more than thirty years, and it had the effect of convincing him that he had been in error in regard to it. The existence of this disease in young subjects, of which there are many cases on record, clearly proves to my mind that it is a veritale blood-poisoning, and entirely distinct from hysteria and other neuroses. I have known a hysterical woman, under the fear of rabies, from having been bitten by a dog, manifest symptoms somewhat allied to those of hydrophobia; but a critical examination revealed the true nature of the disease. Such a case existed some years ago in Camden, and was very much talked about in Philadelphia; but the recovery of the lady satisfied the community of the true nature of the attack.

Dr. S. W. Gross asked Dr. Dulles if he desired to be understood as stating that hydrophobia was not a specific disease, but a pure psychosis.

Dr. S. D. Gross inquired whether Dr. Dulles was willing to be bitten by a dog suffering from hydrophobia as a test of his belief in the non-existence of the specific disease in man.

Dr. Dulles declined at present to give an answer to the inquiry of Dr. Henry Hartshorne; because to do so would involve a discussion almost as long as that of the paper he had read. He preferred at this time to confine himself to the subject of hydrophobia as reported to occur in man.

In reply to the question of Dr. S. W. Gross, Dr. Dulles said that if the specific element in hydrophobia be eliminated—as he believed it ought to be—there remained nothing except to consider the cases as pure psychoses, or as errors of diagnosis. It is, he said, remarkable how little physicians seem to be aware of the number of conditions in which, as is well known to students of the subject, the symptoms of hydrophobia are simulated. In reply to Dr. S. D. Gross, he said that the question the latter had asked proposed not so much a test of the truth of his convictions as of his personal courage, and this was not the subject under discussion. But he could say that there had been a disbeliever in the specific theory of hydrophobia who had been willing to show his faith by his works. In the beginning of this century, Dr. White, a young surgeon, of Brighton, England, had allowed himself to be bitten by a mad dog, and had inoculated himself with this dog's saliva, without suffering any evil effects in consequence.

THE ANNUAL REPORT OF THE LIBRARY COMMITTEE showed that there have been added to the library this year—

2186 volumes,
2107 pamphlets,
2862 numbers of journals.

The total number of volumes now in the library is 26,359. For the ensuing year, the Library will be kept open, except on Sundays and legal holidays, from ten o'clock a. m. to five p. m.

There are in the collection 3381 duplicates, and particular attention was called to this fact, inasmuch as it affords a rare opportunity to other libraries, of augmenting their list at comparatively small expense.

THE REPORT OF THE COMMITTEE ON THE DIRECTORY FOR NURSES

showed that the number of nurses registered December 1, 1882 209
Added during the year 104
Lost by striking from roll. 6
Lost by withdrawal 4 10
Net gain 94
Present number 303

Total number of nurses furnished during the year, 733—an average per month of 61, as against 49 for last year.

Largest number (February) 84
Smallest number (August) 34

Sent outside of the city, but within the State, 63
Sent to other States 59
Wet nurses furnished 17
Of registered nurses, there are males 39
" " " females . . . 264
Graduates of training schools 60
Non-graduates 243

The amount given to the library during the last year was $200, and for the present year, $300. Many physicians take great trouble and waste much valuable time in hunting up nurses personally; or, having obtained a good nurse through the Directory, they transfer her from one patient to another directly, instead of through the Directory. Were they to use the Directory they would obtain the *same* nurses, and add to the income of the Directory, and so to the appropriation to the Library.

It is the desire of the committee to make the Directory also a bureau for all needed information for the sick; and they have in contemplation measures by which, if any one desires to obtain boarding in the country, or at the seaside, for cases of whooping-cough, or for recent cases of measles, scarlet fever, or diphtheria; and for information concerning all appliances for the sick, such as invalid-chairs, wheel and other crutches, bed-rests, fracture-, water-, or air-beds, etc., he may obtain the object he seeks at the Directory.

EDITORIAL DEPARTMENT.

PERISCOPE.

Tobacco Poisoning.

The following valuable extract from a lecture on this subject by Mr. Jonathan Hutchinson, we take from the *Med. Times and Gaz.*, January 12, 1884:

In this connection let me relate to you a case which is instructive, although not so well authenticated as to detail as I could wish. I had the narrative from a medical man of great intelligence, who was himself the subject of it. He told me that some years before I saw him, he had for some months been "nearly blind." He lost reading power, and "could scarcely recognize his friends." He consulted, separately, four distinguished ophthalmic surgeons. One said that he could find nothing amiss, but gave a gloomy prognosis. Another thought the optic discs pale, and another, that all that he could see were unusually large physiological cups. Two conjured him not to smoke; a third said he might smoke as much as he liked; and another omitted any opinion on this point. He had been smoking very heavily, and drinking very moderately. The failure had begun whilst on a visit to Germany, when he had smoked still more than usual, but a mild tobacco. In spite of the advice given he did not, as he says, in any way diminish his smoking. He took strychnia until his muscles jumped, but was no better. On one occasion, whilst at his worst, he dined with a friend and took "quite as much champagne as a respectable person ought to do." This was against his usual habit, which was to be abstemious in wine. The result was that when he reached his home after the dinner, he found, to his delight, that he could read small print. In the morning, however, his sight was as bad as ever. At length he consulted a fifth specialist, who ordered him small doses of opium. Finding some, but not all the benefit he desired, he took not small doses but large ones, and had the good fortune to have his vision steadily improve, until he could see again almost perfectly. He had some difficulty in leaving off his opium, but gradually diminishing the dose, he at length did so. Now Dr. —— assured me that he knew of no cause for this attack of amaurosis, nor of any explanation of its cure excepting that assigned. He had been in good health all the time, and neither before nor since had he suffered from any indications of nervous exhaustion. He was not overworked, nor subjected to any mental distress. You will see that I have no accurate information as to the degree to which the amblyopia had proceeded, nor excepting from what he remembered as to the exact state of his discs. Still, the case fits very closely indeed with the facts with which we have been familiar in a hundred instances of so-called tobacco amaurosis. I have seen many a patient affected in just the same way improve immediately and permanently on leaving off smoking. But here we are assured there has been no diminution whatever at any time. Let me say here that my patient was a man clearly fond of pictorial effect, and he may have unconsciously exaggerated. It

may have been that he did reduce his quantity or quality, it may have been that he indulged to very great excess before the outbreak, or that there was something in the German tobacco which he got which specially poisoned him. I incline, however, rather to the belief that we have here an instance of one drug efficiently counteracting the ill-influence of the other. The opium perhaps relaxed the set of blood-vessels which the tobacco had thrown into spasm. This suggestion is in keeping with what was noted after the champagne dinner.

I have known many cases in which the subjects of smoker's amblyopia recovered perfectly, although they never left off smoking; and of those who had given it up for a time, I do not know that I ever once witnessed a relapse when the habit was, as it always is, resumed. It may be thought that such facts go against the belief that tobacco has anything to do with it, and that this is made almost a certainty by such a case as that which I have just related. For myself, I do not think so. Show me parallel cases occurring in those who do not smoke. It is possible that even one or two of such might be produced, but they are infinitely rare; whilst in heavy smokers, this form of transitory amaurosis is an everyday occurrence. If cases were forthcoming in which there had been no smoking, my reasoning would be this—there is probably a form of nerve disorder, perhaps a passing neuritis, perhaps only a vascular ischæmia, which may be induced by exciting causes of the precise nature of which we know nothing, but concerning which it is still in the highest degree probable that something acts as the predisposing cause. No doubt there is idiosyncrasy in the furthest background; as a middle stage, the long-continued habit of smoking; and lastly, some unrecognized influence—some depression of nervous tissue perhaps—which determines the attack. The final exciting cause may in some cases be important, and in many it may perhaps be absent, the tobacco being itself sufficient.

You will see that these conjectures open to us a very interesting chapter in reference to the influence of drugs in general, especially of those drugs which we give over long periods of time, and of those which become, with many persons, articles of ordinary use quite independent of medical prescription. We do not know but what other articles of which the chief influence is upon the nervous system may after long continuance produce injurious results. We can by no means safely assume that because a nervine stimulant is borne with impunity, or even with apparent advantage, that therefore it is wholly innocuous. It may be that its use involves the risk of very peculiar and wholly unexpected disorders. In the light of this conjecture we ought to examine as to all that is possible in reference to the different kinds of wine, tea, coffee, hops, quinine, absinthe, chamomile, and many others. I shall ask you presently to observe the facts as to the connection between arsenic and attacks of herpes zoster, facts which are, let me say, somewhat similar to those in reference to tobacco and attacks of amblyopia. Before proceeding to this subject, I wish to take an illustration from an article which comes into the diet category. The study of drugs is often sufficiently difficult, but that of diet is surrounded by peculiar fallacies. Especially we must remember that both in prescribing and in feeding, combination is often everything. A thing which might have agreed well alone, may poison when taken with something else; or conversely, that which alone would certainly have disagreed, may go all right with its proper adjunct. If you put tannin with your tobacco, a man wholly unaccustomed to smoking may take a pipe with impunity. So, also, camphor counteracts the effect of tobacco, and belladonna prevents the headache from opium. Not only must we keep in mind, in all questions of diet, the possible influence of some unremembered combination; but we must bear in mind, that the state of the individual varies at different times. Most of our patients are marvellously unobservant in these matters, or, rather, observe in a hurry, miss out facts, and arrive often very confidently at most erroneous impressions. Sometimes, however, we chance upon an acute and careful witness as to his own health and the things which help or hurt him. When such is found, prize him and listen in patience to his narrative. I have told you in a former lecture how in respect to "egg poisoning" it is often unsuspected by the patient, and how, also, in some cases it is only in certain conditions of health and under certain circumstances that eggs do disagree. Now, just the same is true of tea and coffee; they will agree under certain conditions, and not under others. The man to whom tea has appeared for years to be an essential of comfortable existence, may suddenly find himself compelled to abstain from it. It may be that slowly this beverage has itself induced a change in the state of the nervous system; but it may also be that some other change in diet has taken place, or, perhaps, that it is the mere result of advance in age.

A Case of Retention of a Mummified Three Months' Fœtus until the Seventh Month after Conception.

Dr. I. Henry Fruitnight reports this case in the *Am. Jour. Obstetrics*, January, 1884:

In the latter part of April, 1883, Mrs. S. menstruated for the last time. Soon afterwards she developed the usual sympathetic and reflex symptoms of pregnancy, such as "morning sickness," shooting pains in the breast, languor, etc., and at the same time noticed that her abdomen, as well as her breasts, were increasing in size. As she had already borne three children, she naturally concluded that she had become pregnant for the fourth time. I had attended her during the last two confinements, both of which had been normal in every particular. In the middle of August she was very much frightened by the occurrence of a convulsion in her youngest child. A few days subsequently, on August 17, she observed a discharge of blood from the vagina, but unaccompanied by pain. The bleeding, which was not profuse, continued for a few days, and recurred later in the month. On September 5 it again appeared, and she presented herself before me for examination. On physical examination, I found a little oozing from a very slightly patulous os. The uterus was enlarged, but it seemed to me not quite so large as it should have been at the supposed period of pregnancy, now about four and

one-half months. My diagnosis was a partial separation of the placenta from the uterine wall, and hemorrhage as a result, both into the placenta and externally. I advised quiet and rest, and prescribed gtt. x. ol. erigeron canad. on sugar every two hours, until hemorrhage ceased. I did not see the patient again until November 3, when she continued the history as follows: She said "that she almost doubted that she was in the family way, because she was now near her seventh month, and had never felt life, though she thought that at one time she had been aware of the movements of the fœtus. Moreover, after the last discharge of blood, she said that she had grown smaller around the abdomen, and that her breasts also had become smaller; and she also stated that at about the time of the first bleeding, the reflex symptoms of pregnancy, as vomiting, etc., had disappeared."

I appointed a day for a physical examination, but on the following day, November 4, I was hastily summoned to my patient's home. She was suffering from uterine contractions, and was bleeding from the uterus. I made a digital examination, and discovered a globular body, about the size of a hen's egg, protruding from the os uteri, and by my manipulation it was ruptured, and a fluid escaped. Nothing further could be detected, but when I withdrew my finger, I observed a piece of membrane adhering thereto. She was placed upon ergot, fluid ext. Squibb, ʒj. every two hours.

I again examined her on the following day, and detected what I surmised to be the leg of a fœtus of about the third month of development. But as it could not be budged, I decided not to interfere, but continue the ergot as before. On the evening of the same day I again visited my patient, and was then enabled to deliver her of a fœtus. My surmise had been correct; it was a foot presentation of a fœtus of the development of about three and one-half months. Its form, however, was flattened from compression. It was very friable. The viscera of both the thoracic and abdominal cavities were exposed to view, and very small and shrivelled. Its color was of a dark brown, and it was leathery and wrinkled, and hence called a mummified fœtus. And as Prof. Lusk says, on p. 288 of his admirable treatise: "The subcutaneous areolar tissue had disappeared, and the skin lay in direct contact with the muscles." No trace of putrefaction was discoverable. The umbilical cord seemed normal, though somewhat long. After the fœtus had been removed, I attempted to reach the placenta, but I was unable to do so. I continued the ergot as before during the night, hoping that it might be expelled naturally, as it eventually was at some hour in the night.

The placenta was quite small, measuring 3½ inches longitudinally, and 2¾ inches transversely, and having an average thickness of ⅞ of an inch. It weighed about 2¾ ounces. Its tissue was very hard, dry, tough, and yellowish. It showed traces of fatty and fibroid degenerations.

On one edge of the circumference of the placenta were the remains of a large decolorized clot, evidence of an earlier hemorrhage, possibly of the one in August. There were also to be seen recently formed clots.

It seems to me that this is a quite uncommon and interesting case. Most probably the first hemorrhage caused the death of the fœtus, and induced the changes in the placenta. The integrity of the membranes preventing the access of air, explains the immunity from putrefaction. This arrest of development and mummification of the fœtus, and its subsequent retention in utero for many weeks and months, and at times even beyond full term, happens more frequently in twin or multiple pregnancy. In these last cases, quite often one of the fœtuses becomes a victim to this perversion of nutrition; one fœtus maturing normally, the other mummifying. But in a single pregnancy, as the case just related, it occurs very infrequently. From the whole clinical history of the case, the fœtus must have been blighted at about the third month, and remained innocuous in utero for four months, before nature took it upon herself to expel the intruder from the uterus. Neither parent exhibits any syphilitic taint, nor have they ever suffered from specific constitutional infection.

The Unity of Poison in Diseases.

Dr. G. De Gorrequer Griffith read the following paper before the British Medical Association at its last meeting:

In the year 1875, I first called attention to the fact that what is termed scarlatina occurring in the puerperal is frequently not scarlatina at all. But, before I proceed further, I must explain what I mean. I hold that there are two forms of scarlatina; the orthodox—viz., that contracted from a previously affected person, or something infected thereby—and the septicæmic, or toxæmic—viz., that which is evoluted or generated *de novo*, as a result of autogenetic blood-poisoning, such as occurs in puerperal cases, or is evolved as a consequence of hetero-genetic blood-poisoning, such as arises (where no scarlatina had existed before) from drains, sewers, imbibition or ingestion of deleterious articles of drink—water, milk, cream, etc.—or of food; and from decomposing animal or vegetable substances. This toxæmic or septicæmic scarlatina, which is evoluted from the above causes, is identical with the "surgical scarlatina" of Paget; and will, on strict investigation, be found to be the form of scarlatina which more usually prevails among puerperals. In saying, "It is not scarlatina at all," I mean it is not the orthodox—namely, that which is recognized by all the profession, and is, as all agree, contracted from a previously-infected person or thing.

While carrying on this investigation, I was struck with the unity of origin in cases of puerperal fever, and typhoid also; and, in pursuing the inquiry, found how, from the same source, there would spring erysipelas, scarlatina, typhoid, puerperal, and diphtheria fevers; sore umbilicus in infants, sore eyes, sore mouth, and sore throats, embracing a very wide area of inflammation and inflammatory conditions of palate, tonsils, pharynx; and, passing still further on in the respiratory tract, the larynx, the bronchi, the pleuræ, or the pleuræ and lung, would be found involved; so that toxæmic or septicæmic laryngitis, bronchitis, pleurisy, pneumonia, and pleuro-

pneumonia, attacking a variety of persons, may all, as in the case of the other forenamed ailments, viz., toxæmic, typhoid, etc.—as I call them, to distinguish them from the orthodox—be traced to the same causes; as could also hepatitis, diarrhœa, dysentery, cholera, enteritis, hemorrhoids, and a large number of affections hitherto considered to be utterly distinct, and having no connection with each other, no point in common, no place where all meet together, because they diverge so much afterwards. Hence, I formulated, as a heading to my papers, unity (as regards origin) of poison in the diseases I have just enumerated, and in many others, usually considered to be separate and entirely distinct.

This unity and differentiation in the course of evolution is now recognized by many medical men. Moreover, I found one disease (I adhere to the current word), or, as I term it, one set of symptoms, to be evoluted from another, in some cases so far apart in nosological arrangement as to be said to be wholly and entirely distinct, distinct even to specificity; and a number of nosologically divided diseases (sets of symptoms) to be evoluted from the one unity-point, the one common ancestry—differentiated no matter how widely, as they actually become, afterwards. I have, therefore, extended the formulated heading into "Unity of poison in diseases usually considered to be separate and entirely distinct; and the evolution of one from another apparently quite distinct, and of many diseases—seemingly all different—from one unity or common origin;" evolution from this unity leading to differentiations. Further, I recognize that symptoms occurring in the course of an affection, say such as scarlatina, symptoms which ordinarily are termed "complications," may become primary motors of disease, originating a fresh epidemic, it may be—fresh, inasmuch as it would differ from that in the course of which it was itself evoluted. For example: Diphtheria not unfrequently is met with as a "complication" of scarlatina (I would say it was part and parcel of the scarlatina), which, in this instance, would be spoken of as the primary disease, the other as being secondary; this latter would be conveyed to a number of persons, even to such a number, it may be, as to constitute an epidemic, spreading fast from one to another. Then this diphtheria would cease to propagate itself, or would cause something quite different to be evoluted, or would cause diphtheria to be evoluted in the persons exposed, or in the course of these evolutions it would hark back to that which set it agoing—viz., scarlatina; or there would originate or evolute, in a number of the exposed, certain other symptoms, usually considered sequelæ, but not actually part of the scarlatina; so that another outburst of something, seemingly altogether different from scarlatina and diphtheria, would take place, to cause perhaps another new evolution; or, again, to hark back to scarlatina or diphtheria, or both combined, as it would be termed; or would, as it were, leap forward and cause to be evoluted, in a certain number of cases, a very ulterior sequela of scarlatina—say rheumatism, or rheumatic fever, and heart and pericardic affections; or the latter *per se;* or, it may be, nephritis (the scarlatinal form) would be evoluted, without any other intermediate symptoms being noticed, or any pre-existing warnings having been detected, or indeed been noticeable or detectable, such a form of nephritis as would be infectious—infective nephritis, I would call it—inasmuch as it has the power to set up scarlatina, or diphtheria, or any other ailment or group of symptoms coming within the range of its infectivity. In this way, new sets of symptoms may be evoluted, new outward manifestations of the inward workings or evolution, a new disease in fact, as would be said in current medical phraseology. In this I am fortified by the Bradshawe Lecture of Sir James Paget, and his and Sir William Gull's addresses on "Collective Investigation of Disease."

By unity of poison, I would beg my hearers to bear in mind I mean, not that the poison is always the same, but that the one poison—the one *origo mali*—whatever it may be, will originate several so-called different affections—widely different seemingly, widely different they would be spoken of, widely different even to be considered in every respect "specific."

The Gouty Kidney.

In the *Lancet*, January 12, 1884, we read that an interesting address was given to the Berlin Medical Society, at a recent meeting, by Professor Virchow (*Berl. Klin. Wochenschr.*, No. 1, 1884), upon the relations of gout and renal disease. He first of all dispelled the erroneous idea that gravel and calculus have anything to do with gout. He then showed that gouty—*i. e.*, uratic—deposits often occur without the patient ever having been the subject of a definite acute paroxysmal attack of the disease; and he pointed out the distinctions between the chronic latent form and arthritis deformans, having only once met with the uratic deposit combined with the peculiar joint condition of the latter affection. The gouty condition depends on imperfect nitrogenous metabolism, and may either be due to the excessive ingestion of nitrogenous food, or to a special disposition to defective elimination of nitrogenous waste. The "gouty kidney" is characterized by a deposit of urate of soda within the tubules of the medullary portion; but the degree of the renal affection bears no constant relation to the amount of tophaceous deposit about the joints. Indeed, there may be no gouty arthritis present at all, and yet the kidneys be affected. It may be that there is an essential difference in these two classes of cases, but as yet no other condition than that known as the "gouty," and marked by an excess of urate of soda in the blood, is known to produce either the articular or the renal deposit. The kidney is also the seat of chronic interstitial nephritis—puckered and wasted—the wasting involving medulla as well as cortex. Virchow has never seen an *acute* nephritis which from the presence of the uratic deposit could be referred to gout. He points out that the chronic inflammatory change starts in the cortex, at a distance, that is, from the seat of the urates in the medullary tubes; just as in the joint, the urates occur in the cartilages and ligaments, whilst the synovial membrane is the seat of inflammation. From this he argues that it is not the presence of the crystals, but the exudation of the fluid containing the uric acid in solution, that

acts as the irritant; the surfaces in contact with the secretion that are inflamed, and not so much those in which the salt is finally deposited. And here he adduces as evidence an illness from which he suffered towards the close of 1882. He had never had any attack of acute gout, but from time to to time he suffered from slightly reddened and painful swelling of the fingers, interfering with movement. In the course of 1882, he began to suffer from an irritable bladder, with occasional febrile attacks, which passed into considerable irritation of the urinary organs, with pyuria, ischuria, etc.; and he was made very uneasy by being told one day that in addition to the pus, albumen and renal tube-casts had been detected. The renal pelvis, bladder, and prostate—in fact, the whole urinary tract—seemed to be in turn affected by some irritant. One day he bethought him to examine the pus, which was passed in large amount, to determine its source, and to ascertain whether it came from a mucous surface only. On adding acetic acid to the deposit to ascertain the presence of mucus, he was surprised to see the whole microscopic field covered with uric acid crystals to an amount which he had never seen before. Yet there was no suspicion of gravel or calculus, and he rightly inferred that this excess of uric acid indicated energetic alkaline treatment. This he at once commenced, taking borate of soda and Carlsbad water, with almost immediate disappearance of the uric acid crystals from the urine. He continued the treatment for three months, and has never passed any pus, albumen, or casts since. He could give no other explanation than that the blood and urine being highly charged with urates in solution, had acted as irritants to the whole urinary tract, exciting a purulent catarrh—in fact, an inflammation analogous to that which occurs in gout when urates are deposited in the tissues. A few remarks upon the physical and anatomical differences between calcareous deposits in the kidney and the urates closed the communication.

The Influence of Bile in the Assimilation of Food in the Intestines.

The *London Med. Record*, January 15, 1884, says that C. Von Voit (*Centralbl. für die Med. Wiss.*, March 14), records his observations and experiments upon a dog, of seventy kilogrammes weight, having a fistula of the gall-bladder. The absorption of albumen, hydro-carbons, and fat, was noted, with the following conclusions:

1. The digestion and absorption of albumen in the form of meat was not interfered with by the outflow of bile. The nitrogenous constituents of the fæces and of the urine were the same in amount as before the operation. A dog fed exclusively upon meat maintained the same proportion also of these constituents. The maximum amount of meat that was given did not affect the flow of bile.

2. The digestion of grape-sugar was not diminished by the presence of the fistula; the excretion of urea reached as high an amount as previously. An exclusively bread diet was as well digested; while the weight of the animal, and the proportion of nitrogenous elements, were the same as under a mixed diet of bread and meat.

3. The absorption of fat, on the other hand, was notably affected by the existence of the fistula. Whilst, in the normal condition, 99 per cent. of fat would be absorbed, and only 1 per cent. appear in the fæces; in the fistulous animal, only 40 per cent. was absorbed, and 60 per cent. was voided unchanged. Small quantities even of fat in the food interfered with its digestion; whilst larger quantities caused diarrhœa, borborygmi, and offensive flatus, and the evacuation of fat unchanged. The grey color of the stools in icteric disorders, the author considers, depends not upon the coloring matter of bile, but upon fatty matters therein contained. Further investigations were carried out upon two more dogs, in which fistula had been established. In one of these the bile was collected every hour, and the amount calculated for the twenty-four hours. In the case of the second dog, the whole quantity that flowed was collected together. With regard to the composition of the bile, it was observed that the proportion of the sulphur and biliary acids varied with the nature of the food, varying from 4.01 to 4.61 per cent. The nitrogenous elements of dry bile varied from 3.7 to 3.9 per cent. The fluctuations of the sulphur compounds were still greater. The proportion and the absolute quantity of solid matter in the bile varied with the amount and time of feeding, reaching the highest an hour afterwards, and depending, it would seem, upon a reflex flow of blood through the filling of the intestine.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——To those who care to turn once in a while from physic to metaphysics, from science to philosophy, we recommend a pamphlet by Prof. W. T. Harris, entitled, "Philosophy in Outline" (New York, D. Appleton & Co). It is from the pen of a master.

——The "Red Cross Class" of the Agassiz Association have commenced the publication of a series of little books or tracts to disseminate information as to the preliminary treatment of sickness or injury. The first has reference to the treatment of fractures, carrying the wounded, bandaging, etc. (Address Dr. C. E. Warren, 51 Union Park, Boston, Mass.)

——Two numbers of the *Revue d'Hydrologie et de Climatologie Pyrénéenes* have reached us. It is a new journal, published at Toulouse, France, and will be interesting to hydrologists.

——The Proceedings of the Clay County, Mo., Board of Health make a closely printed pamphlet of 13 pages, containing the address of the President, Dr. J. M. Allen; an essay on Water, by Dr. J. R. Eaton; and a paper on Epidemics, by Dr. J. L. Jones. Such publications cannot fail to be a benefit to the community.

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INTESTINAL OBSTRUCTION.

Two cases recently reported to the Suffolk District Medical Society (*Boston M. and S. Jour.*), by Dr. John Homans, bring this question so prominently before us, that a few words on the subject will be appropriate and valuable.

A discussion on this subject at the last meeting of the British Medical Association, participated in by men of great experience, resulted, as might be supposed, in great diversity of opinion, some holding that early operative interference is called for in all cases of intestinal obstruction, while others of equal experience relegate it to a position after all other means have been tried and failed.

To an impartial reader of the various opinions on the subject, it would seem that the best treatment is that which, to a certain extent, is based upon the cause of the obstruction. Of course, it is impossible, in the majority of cases, to definitely decide the cause and the location of the cause, save by exploratory incision; but we usually can approximate it, that is to say, we can decide whether it is due to some trouble that threatens the rapid death of a portion of the gut, or whether the obstruction is due to some slow-proceeding cause, that will not be badly prejudiced by waiting. This will be made apparent to us by the presence or absence of constitutional symptoms.

In the two cases reported by Dr. Homans, the only symptoms were those produced by the retention of fæcal matter in the system, such as general depression of the vital forces, but there were no acute symptoms; no pain (of any moment) no fæcal vomiting, no fever nor acceleration of pulse; hence he waited until all other measures had failed, when, upon opening the abdomen, he found (in both cases) cancer of the descending colon, near the rectum, which completely occluded its calibre. Artificial ani were made, and in one case the patient survived for ten months, ultimately succumbing to the results of cancerous deposits throughout the mesentery and omentum; in the other case, where the operation had been more protracted, and the handling of the intestines much greater, the patient died five hours after operation.

It would seem then that when with non-passage of fæces we have high temperature and pulse, great pain and the usual indications of rapidly approaching damage to the intestine, we should cut down, and if we find the obstruction removable, as an invagination, a twist or a constricting band, remove it; while if it is due to cancer or some irremediable cause, we can make an artificial anus.

But when we do cut down, it seems to us very important that we should search until we have found the cause, rather than to accept Mr. Lawson Tait's advice to make an opening into the first loop of intestine that presents itself. Mr. Tait is an exceedingly high authority; but let us suppose that a cancer, causing the obstruction, exists at a point *between* the stomach and the first loop of intestine that presents—we cannot see how the patient's condition will be benefited by making the artificial anus at this point; while, again, experience demonstrates that when the opening is made high up in the intestine, the patient is much more likely to suffer from gradual emaciation and loss of strength, as might be expected from the abolition of a large portion of the digestive and absorptive surfaces of the body. In one of Dr. Homans' cases there was absolute obstruction for *seven weeks*, which strengthens the arguments for the expectant plan when urgent acute symptoms are not present. The intelligence of the surgeon must guide him in the treatment of intestinal obstruction, just as in all other matters, for no definite absolute rules for his guidance can be laid down.

A case suitable for operation is reported in the *Medical Age*, February 11, 1884. Here, as the result of a kick, peritonitis and obstruction occurred. Abdominal pain was intense and localized, there was stercoraceous vomiting, while enemas only brought away blood and coagula. The autopsy revealed invagination of the cæcum, the lower end of which had sloughed. In this case, cutting down, excising the gangrenous gut, and stitching together the healthy intestine, would have been a justifiable operation, and *might* have saved the boy's life.

ASTOUNDING MEDICAL LEGISLATION.

Of all the schemes to promote the deterioration of the medical profession by injudicious patronage, the most astounding is one that was lately introduced into the Virginia Assembly. The text of the bill runs as follows:

1. Be it enacted by the General Assembly of Virginia, that the sum of seven thousand five hundred dollars be and the same is hereby appropriated out of the treasury, as an annuity to the Medical College of Virginia, to be expended under the direction of the faculty of said college, who are hereby required to report annually to the Governor an account of the disbursement of the said sum of money.

2. That there shall be admitted to the said Medical College of Virginia, while this annuity is paid, free from all charge for tuition, except the sum of five dollars as a matriculation fee, as many students who are citizens of Virginia as there are members of the General Assembly, each member of which is hereby empowered to nominate, in each year, from his county or district, a student to the faculty of said college, who may prescribe the academic qualifications of the nominee.

The plan of "beneficiary students," as practiced by some medical colleges, notably one in Kentucky, is bad enough; but this scheme, which enables every member of the General Assembly of a State to appoint for free instruction every year some young man, is still more surely calculated to lower the standard of medical qualifications and work injury to the profession.

It has been cogently observed by a writer on this question that if free instruction is to be given to young doctors, why not to young aspirants to the bar? why not to clergymen? to civil and mining engineers? If *professional* men of any class are to be furnished for their special business—equipped for their life work—at State expense, why not have commercial and business colleges for clerks, and so on, without end? The *principle is wrong*. Public education can be justified only on the ground, that the citizen by being taught the elements of education is thereby better fitted to meet and discharge his duties to society *as a citizen*, in those functions which are common to all citizens. This reason utterly fails to apply to

professions and professional education. They are *special*, and *individual*, by the very terms of the statement—and therefore outside of the reason which vindicates public school instructions for the masses.

No one man has any claim on the public to be furnished with a business, or to be qualified for it, beyond every other man.

Gratuitous professional instruction at the public expense, is therefore a violation of common right, and a misapplication of the public money.

Already the excess of professional men in proportion to our general population has caused serious reflections, and this bill aims to make it worse.

The question is not a local one. It is not one of Virginia State politics. The medical graduates of her colleges have rights all over this country, and we claim that no State should flood our land with half-educated professional men.

EARLY OPERATIONS.

Far be it from us to advocate the unnecessary use of the knife, which is always a serious matter even in the most trivial operations, and one to be carefully considered in all its possible consequences, and the arguments *pro* and *con* to be carefully weighed; but the thought has been suggested by some recent remarks, whether our surgical results would not be much more satisfactory, if, when ultimate operation is inevitable, it be performed early, before the diseased process has assumed much magnitude, and before any implication of the system has occurred.

We have already noted Jonathan Hutchinson's advice about operating in what he felicitously styles the pre-cancerous stage of cancer, and we have laid stress upon Professor Gross' remarks "On Early Operation in Morbid Growths;" while now Dr. Goodell tells us that our women are very averse to being operated upon (for ovarian disease), hence their proneness to delay matters until they have become very weak.

To what do these remarks of eminent and experienced men point? To early operation; to the removal of the nidus of death, before the system has become seriously impaired, and while the strength is of such a standard as to offer a reasonable hope that the results of the operation will not prove serious.

When a woman, whose age and family history make us think of cancer, presents herself with a nodule in the breast, would it not be proper to at once cut it out? In the majority of cases the operation would be but a trivial affair, even if the lump was *not* cancer, while the chances for radical restoration to health would be much greater than if we had waited for the nature of the disease to be made manifest to our senses as cancer, when the whole body would be probably more or less cancerous, and the system robbed of much of its vital power. The same rule would hold good in all diseased processes, wherein there is a probability that operative interference will be demanded at some more or less remote period, when the prospects for a successful issue will be diminished by this policy of delay.

PUERPERAL FEVER.

In a recent issue we gave a report of a most admirable address on the prophylaxis and treatment of puerperal fever, by Dr. T. Gaillard Thomas, of New York.

The views therein expressed have occasioned considerable comment among the professional brethren of Dr. Thomas, and a recent meeting of the New York Academy of Medicine was enlivened by a discussion of the paper, in which we regret to say that personalities, ostensibly in the form of good-natured repartee, but to an unbiased reader sounding very much like undignified insinuations, were indulged in between Drs. Thomas and Fordyce Barker. Aside from these personalities, the discussion is possessed of sufficient importance to warrant comment.

It will be remembered that Dr. Thomas maintained that puerperal fever is puerperal septicæmia, caused by the entrance of disease germs through some rent or tear that has occurred to the parturient parts during labor.

To this Dr. Barker does not accede, claiming

that while there is a puerperal septicæmia, yet puerperal fever is a disease *sui generis*—whether due to the introduction of a specific germ or not, he does not state. But the most important point on which Dr. Barker differs from Dr. Thomas, and in which most of those who participated in the discussion supported Dr. Barker, was as to Dr. Thomas's recommendation for the use of antiseptic vaginal and uterine injections as prophylactics. Dr. B. and his adherents claimed that not only did experience prove that they were not necessary, but that they are absolutely injurious, as affording a ready and frequent means for the introduction of disease germs. For the past two or three years Dr. B. has absolutely abandoned vaginal injections in normal cases, and his results have been more satisfactory than previously. After hearing the expressions of opinion, Dr. Thomas seemed inclined to modify if not to abandon this particular recommendation, though he still adhered, as did most of those present, and as will every sensible man, to his other recommendations, which, as we said at the time, really consist in scrupulous cleanliness of physician, patient, and attendants.

RUNNING FOR TRAINS.

We have just missed a train, and we missed it because we would not *run*.

This experience suggests to us to offer a few words of advice, through our readers, to the busy men of America who are in a chronic state of "*running for trains.*"

Even to one whose heart is sound, running, when not accustomed to such hurried movement, is certainly not beneficial to the delicate cords and valves of the heart; and should this organ be diseased, it must prove very injurious.

We all know that violent and tumultuous action is to be avoided when the heart is weak, and we also know that running is not the way to avoid it.

In our own experience we know several instances, where men who had previously supposed themselves to be *sound* have run for trains, and getting aboard have fallen exhausted into seats from which they have been removed as corpses; and knowing such cases, we *never* run for trains.

Better miss a train than run the risk of running into the jaws of death; for this strain on the heart cannot prove beneficial to one that is sound, while it most positively will prove more or less disastrous to one that is weak. In this world of unsuspected physical pitfalls, it behooves us "*to make haste slowly.*"

NOTES AND COMMENTS.

"Miryachit" and "The Jumpers."

Dr. William A. Hammond, in a paper read before the New York Neurological Society, described a peculiar disease that is not uncommon in Siberia, and is known as "Miryachit." It is characterized by excessive imitation, that is to say whatever the patient sees anybody else do, he at once does the same. To illustrate:

"We afterward witnessed an incident which illustrated the extent of his disability. The captain of the steamer, running up to him, suddenly clapping his hands at the same time, accidentally slipped and fell hard on the deck; without having been touched by the captain, the steward instantly clapped his hands and shouted, and then, in powerless imitation, he too fell as hard and almost precisely in the same manner and position as the captain."

This disease brings to mind the remarks made by the late Dr. George M. Beard, before the meeting of the American Neurological Association, in 1880, relative to the "Jumpers" or "Jumping Frenchmen" of Maine and northern New Hampshire.

In June, 1880, Dr. Beard visited Moosehead Lake, found the "Jumpers," and experimented with them. He ascertained that whatever order was given them was at once obeyed. Thus, one of the jumpers who was sitting in a chair, with a knife in his hand, was told to throw it, and he threw it quickly, so that it stuck in a beam opposite; at the same time he repeated the order to throw it, with a cry of alarm not unlike that of hysteria or epilepsy. He also threw away his pipe, which he was filling with tobacco, when he was slapped upon the shoulder. Two jumpers standing near each other were told to strike, and they struck each other very forcibly. One jumper, when standing by the window, was suddenly commanded by a person on the other side

of the window to jump, and he jumped up half a foot from the floor, repeating the order. When the commands are uttered in a quick, loud voice, the jumper repeats the order. When told to strike he strikes, when told to throw he throws whatever he may happen to have in his hand. Dr. Beard tried this power of repetition with the first part of the first line of Virgil's "Æneid" and the first part of the first line of Homer's "Iliad," and out-of-the-way words of the English language with which the jumper could not be familiar, and he repeated or echoed the sound of the word as it came to him in a quick, sharp voice, at the same time he jumped, or struck, or threw, or raised his shoulders, or made some other violent muscular motion. They could not help repeating the word or sound that came from the person that ordered them, any more than they could help striking, dropping, throwing, jumping, or starting; all of these phenomena were indeed but parts of the general condition known as jumping.

I am not able (says Dr. Hammond) to give any certain explanation of the phenomena of "Miryachit" or of the "Jumpers," or of certain of those cases of sleep-drunkenness which seem to be of like character. But they all appear to be due to the fact that a motor impulse is excited by perceptions without the necessary concurrence of the volition of the individual to cause the discharge. They are, therefore, analogous to reflex actions, and especially to certain epileptic paroxysms due to reflex irritations. It would seem as though the nerve-cells were very much in the condition of a package of dynamite or nitro-glycerin, in which a very slight impression is sufficient to effect a discharge of nerve force. They differ, however, from the epileptic paroxysm in the fact that the discharge is consonant with the perception—which is in these cases an irritation—and is hence an apparently logical act, whereas in epilepsy the discharge is more violent, is illogical, and does not cease with the cessation of the irritation.

Certainly the whole subject is of sufficient importance to demand the careful study of competent observers.

Tuberculosis of the Testes.

To the New York Pathological Society (meeting January 9, 1884), Dr. A. G. Gerster presented the testes of three different patients which he had recently removed for acute tuberculosis. The first specimen was from a laborer, thirty-eight years old, who was recognized to have a hydrocele, but whether simple or dependent upon disease of the testicle was not at first determined. There was no known cause for the condition; he denied venereal disease. Volkmann's operation for hydrocele was successfully performed, the wound healing in a perfectly normal manner; but, five weeks after his dismissal from the hospital, the patient returned, saying that he had passed a bad night, had had a chill, and had begun to lose flesh and strength. The testicle was then extirpated, and was found to show central tuberculosis, the hard, characteristic tubercular mass not yet having begun to break down. The second specimen showed a slightly more advanced stage of the disease, and was from a man thirty-one years of age, who had suffered acute orchitis and epididymitis of traumatic origin. Six or eight weeks after the injury the testicle was painful, swollen, and hard, the swelling extending up the cord some distance. The patient suffered chilliness and sweating, and presented a condition demanding removal of the testicle, which was done. The chief interest of the specimen related to the condition of the tunica vaginalis, which, instead of being smooth and hard, resembled very much the synovial membrane in cases of tuberculosis of the joints. There was incipient breaking down of the tuberculous deposit centrally. In the third case there had been chills, emaciation, loss of appetite, and swelling and pain of the testicle, and, on removal, the organ was found to consist almost entirely of broken-down tissue; the tunica vaginalis had become obliterated. Dr. Gerster remarked that the diagnosis could be made much earlier in these cases than was formerly done, and lead to proper treatment in the way of extirpation, whereas it used to be the practice to let the condition remain until a fistulous opening formed in the scrotum, and the case reached the state falsely called hernia testis. In the discussion which followed, Dr. Gerster said that there had been no physical signs of tuberculosis in any of the other organs of the body. The other general symptoms—chill, sweats, etc.—disappeared on removal of the diseased testicles.

Slop Diet.

There can be no question in the mind of any thoughtful man that diet must have a great influence upon the course of disease processes, hence it is that we note the following reply, in the *Lancet*, January 12, 1884, to one who writes to inquire more fully about slop diet:

The objects aimed at in giving slop diet may be—(1) depletion of the system by cutting off the

supply of nitrogenous and combustible material; (2) the securing of rest to the digestive organs; (3) the avoidance of the ills which follow upon the taking of food upon which the digestive and assimilative organs are unable, through debility or actual disease, to exert their full function. Experience has shown that cutting off all food from healthy men causes death in about five days, and is attended with great suffering. If water alone be allowed, the suffering is very greatly lessened, and life can be prolonged for about the same number of weeks. The introduction of water entails no "work" upon the digestive or assimilative organs, and therefore it admirably fulfils the conditions of "slop diet," whether required for any one of the three objects mentioned above. It is therefore the best "slop diet," and we believe that as such it is not sufficiently appreciated by the profession. Saline solutions stand next in order of merit, requiring no "digestion," and undergoing little, if any, change when passing through the assimilative organs. Saccharine solutions must rank next; they are readily absorbed, but possessing distinct nutritive value, they are not so depletive as water, and, moreover, being liable to undergo fermentation in the alimentary canal, they do not afford such complete rest to that organ. They also have the disadvantage of being less palatable than the former. Decoctions of starch require distinct "digestion" and "assimilation," possess high nutritive value, if unabsorbed are liable to fermentation, and may leave a considerable residue of undigested matter to pass along the intestines. Solutions of albumen must be placed at the bottom of the list, as requiring digestion and assimilation, and as possessing the highest nutritive value, being "tissue-forming" as well as "force-producing."

Acute Pyæmia of Urethral Origin.

To the New York Surgical Society (*Med. News*, December 22, 1883,) the President (Dr. R. F. Weir) presented kidneys and heart illustrating acute pyæmia of urethral origin. They were removed from the body of an apparently healthy man, twenty-five years of age, who had been subject to gleety discharges traceable to stricture. He had had instruments passed from time to time during the summer and in the autumn. Last Sunday his attending physician introduced a sound, No. 23 French, which passed into the bladder without violence, and with no more difficulty than had been produced on all the other occasions. A few drops of blood escaped. On Monday the man was seized with a severe chill. When Dr. Weir saw the patient he had a temperature of 105° F., and he supposed it to be due to malaria, as he knew that the patient had suffered formerly from such chills, which had invariably yielded to quinine. The temperature, however, remained high, and within forty-eight hours afterwards he began to develop joint pains and effusions. He complained of no distress in the bladder, but said that once or twice he had noticed that the urine was very slightly tinged with blood. The man became so delirious that he was removed to the hospital, where he died twenty-four hours afterwards. Before death, evidence of pericarditis and endocarditis was detected, and the opinion was formed that it was pyæmic. At the autopsy multiple infarctions with grayish centres were found in the cortex of the left kidney, the right being comparatively unaffected. Pericarditis and recent valvular disease, with excavation at base of one of the cusps (ulcerative endocarditis), were found, and infarctions in the centre of the substance of the heart. The rapidity of the course of the case was especially interesting. Dr. Weir had not seen in acute pyæmia heart lesions so distinctly marked as in the present instance. There were no lacerations of the urethra, but evidences of croupous cystitis were present.

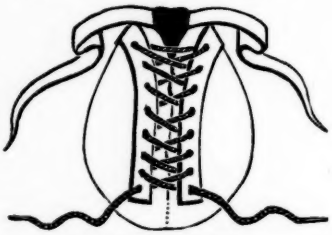
Tubercular Peri-urethritis.

From the *Centralb. für Chirurgie* we learn that at the recent Congress of German Naturalists and Physicians, Dr. Englisch presented a paper with this title. The disease, he says, begins as an inflammatory tumor in the bulbous portion, usually as an inflammation surrounding the urethra, or involving Cowper's glands. It extends constantly, as well toward the surface, leading to perforation of the skin, as in other directions toward the urethra, prostate gland, rectum, or epididymis. The urethra is often perforated, usually at the junction of the bulbous and membranous portions, though sometimes in the pendulous part. The disease is characterized by a growth of fungous granulations resembling very closely those seen in tuberculosis of the articulations. It occurs in tubercular and tubercularly disposed individuals, and may arise from urethritis, specific or otherwise, injuries of the urethra or perineum, or anything which occasions or is accompanied by inflammation. The course of the disease is usually slow, yet in some cases it is quite rapid. If there is already a pulmonary affection it now progresses more quickly, and if none has existed it is now developed. Since the fungous granulations

present great resistance to all modes of treatment, there is but little to be accomplished in the way of cure. New granulations are continually formed, and any attempts to close the fistulæ are unsuccessful. The retention of a catheter for a sufficiently long time to allow of their closure, is rendered impossible by reason of the quickly-produced vesical catarrh. Hence the therapy is narrowed down to attempts at improving the general condition by means of constitutional remedies.

A New Method of Strapping for Hydrocele.

To the Suffolk District Medical Society (*Boston M. and S. Jour.*, February 14, 1884), Dr. J. C. Warren showed a chamois-leather bag which he had devised for the purpose of exerting pressure on a small collection of fluid left in the tunica vaginalis remaining after an operation for radical cure. The bag can easily be applied by isolating that portion of the scrotum containing the testicle to be compressed and forming a pedicle, which is preserved by tightening the chamois-leather string. The bag is then laced from above downwards, and if it has been made to fit snugly, exercises a gentle and equable pressure. If it is



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necessary to increase the pressure, a few turns of a common narrow roller bandage around the equator of the globular mass are all that is necessary. This bag is free from the well-known discomforts of plaster, is easily made and applied, and can be removed and re-applied by the patient himself as often as is desirable, thus avoiding excoriation at constricting points. In the single case in which it was used the effusion promptly disappeared, and has not since returned at an interval of nine months.

The Brain and its Influence on Mental Faculties.

The *Brit. Med. Jour.*, January 19, 1884, says: A recent discussion on the weight of Turgenieff's brain has called the attention to the subject of human brains, and a scientist, M. Nikiforoff, has published in the *Novosti* an article, in which he states that the weight of the brain has no influence whatever on the mental faculties. The average weight of a man's brain is, according to Luschka, 1,424 grammes, of a woman's 1,272 grammes; Krause gives the averages as 1,570 and 1,350 respectively. The maximum weight is said to be 1,600 grammes, and the minimum 800 grammes. The brain of the celebrated mineralogist, Hausmann, weighed 1,206 grammes. It ought to be remembered that the significance of the weight of the brain should depend upon the proportion it bears to the dimensions of the whole body, and to the age of the individual. Byron died at the age of thirty-six—the great geometrician, Gauss, at seventy-eight years of age; the brains of the two should, therefore, not be compared. It is equally important to know what was the cause of death, for long disease or old age exhaust the brain. To define the real degree of development of the brain, it is, therefore, necessary to have a knowledge of the condition of the whole body; and as this is usually lacking, the mere record of weight possesses little significance.

Modifications in Muscular Structure after Nerve-Section.

From the *Rev. Scientifique*, January 12, 1884, we learn that M. Babinsky has recently presented a communication on this subject to the Académie des Sciences. These modifications consist essentially of simple atrophy of the contractile substance, with multiplication of the sarcolemma cells. Babinsky shows that atrophy of the contractile substance progresses in direct proportion to the development of the protoplasmic structure; this dissociates the primitive cylinders, and thus brings out the field of Cohnheim much more distinctly than in the normal state; it accumulates in certain fasciæ, at their periphery and between the sarcolemma and the striated substance, in other fasciæ at their central part, so that the striated substance is turned back toward the sarcolemma. This last disposition is particularly interesting, because the altered muscular fibres are exactly similar to muscular fibres in process of development.

Experiments on the Pneumogastric Nerve.

Before the Academy of Medicine in Ireland (*Brit. Med. Jour.*, January 26, 1884), Dr. Scott read a preliminary communication concerning experiments on the central end of the pneumogastric nerve. In some experiments performed by Dr. Purser and himself on the central end of the vagi, certain facts were observed differing from

those hitherto described. First, on section of one vagus, the heart-beat was not retarded, but there was a slight fall of blood-pressure; secondly, on section of the vagi, a considerable rise of pressure ensued, associated with a retardation of the heart-beat, these being independent of the stoppage of respiration. The foregoing facts would show that the heart was inhibited by other means than the vagi. The respiration also was differently affected when one or both vagi were divided. In the former case, the stoppage was always followed by expiration; in the latter, by inspiration.

The president testified that the tracings exhibited were accurate copies of the original tracings. They were very curious in a great many respects, and the phenomena were extremely complicated, indicating not only the action on the nerves, but the influence produced by the asphyxia.

Dr. Scott, in replying, observed that it was only after the section of both vagi that the beats made their appearance.

The Relation of the Medulla to the Sexual Function.

In the *Practitioner*, February, 1884, Dr. Alexander Harkin advances arguments in favor of Van der Kolk's notion that this part of the nervous system is particularly related to the genital function; and believes there to be a "sexual centre," as well as "respiratory," "convulsive," and other centres in this region. He points out the association between sexual excess and neurotic affections, notably epilepsy; and thinks there is good reason for the belief that so-called "neurasthenia spinalis" and "abnormal seminal losses" depend on a congested state of the medulla. He selects three cases in which the symptoms of these conditions were very marked, in each of which striking relief and even cure was effected by wet cupping over the nape of the neck. Cold douches in the same region, and the administration of bromide of potassium and belladonna, are often, he says, as effectual. Dr. Harkin's views are certainly worthy of consideration; and his line of practice, combined with precepts intended to strengthen the will and improve the physical condition, is one which should not be disregarded in dealing with those unfortunate subjects of a hypochondriasis induced by perverted and unnatural sexual excitation.

The Thirteenth Cranial Nerve.

The *Lancet*, February 2, 1884, says: Regarded physiologically, the chorda tympani hardly seems to be a branch of the facial nerve. Dr. Sapolini, of Milan, has been working at the anatomy of the chorda tympani, and comes to the conclusion that it must be regarded as a nerve *sui generis*. He believes it contains motor and sensory fibres. Its deep origin is placed about the posterior end of the floor of the fourth ventricle, whence it traverses the floor of this ventricle in a forward direction. It leaves the surface of the pons Varolii quite close to the auditory nerve, with which it exchanges many filaments. The nerve, once at liberty, is composed of two filaments, and is embraced by the seventh and eighth nerves, with which it pursues its course through the internal auditory meatus and the geniculate ganglion. The rest of its course, under the name of the chorda tympani, is well known.

The Physiology of Deglutition.

Some admirable studies on the phenomenon of swallowing were published recently in Berlin by the Physiological Institute from the pen of Dr. S. Meltzer, now of New York city. One of these was with reference to the mechanism of deglutition, its causation and suspension, the other on the irradiation of its action, and the general import of the act.

These essays are not only excellent examples of physiological research, but their author has given them practical applications. He finds, for instance, that swallowing increases cardiac action and derives from this some sound precepts for the treatment of fainting. In severe choking and coughing spells, rapid and frequent swallowing will relieve the local irritation. We hope this investigator will continue his researches.

An Inhalation for Catarrh, Coryza, Asthma, etc.

M. St. Martin recommends this formula in the *Jour. de Med. de Paris:*

	Parts.
Acid. carbolic,	5
Ammon. pur. liq.,	6
Aquæ dest.,	10
Alcohol,	15

Soak some cotton wool with this mixture, and breathe this vapor from a wide-mouthed bottle.

Acute Aortitis.

In the *Gaz. Med. de Paris*, M. Peter gives the following diagnostic points in this disease:

An agonizing pain at the level of the preaortic region; a burning sensation, sometimes excruciating; and a dyspnœa, which is never wanting, and which is especially characteristic, because on auscultation of the respiratory organs nothing can be discovered to account for it.

Special Report.

NO. XVI.—OPHTHALMOLOGY.

BY C. S. TURNBULL, M. D.,
Oculist to the German Hospital, Philadelphia.

(*Continued from page* 318.)

Sattler also introduced lochial secretion into the eyes of an infant. After forty hours blennorrhœa developed. This proves by direct experiment that blennorrhœa is due to infection with lochial secretion, and that the conjunctival sac of the new-born is the best soil for breeding the micrococci of blennorrhœa, when in a mixture of various kinds of bacteria. Probably the micrococcus of blennorrhœa floats about the air. It enters the vagina, there undergoes a sort of preliminary culture, and thus acquires the peculiar power of producing, under certain favorable conditions, a blennorrhoic inflammation in the male urethra, and the conjunctiva. The most rational form of treatment would, therefore, seem to be the antiseptic.

Cas d' Auto-inoculation Vaccinate ayant Donné lieu a une Ophthalmic Diphthero-purulente.

Fifty-six days after the development of a vaccine pustule on his own arm, Stocquart observed purulent conjunctivitis in the left eye, followed by false diphtheritic membranes on the conjunctiva. Cured by antiseptic treatment. Probably some of the vaccine had got into his eye, as with the exception of the arm and eye no other part of the body was affected.

The Treatment of Gonorrhœal Ophthalmia. The Lancet, October 14, 1882, p. 345.

In three cases of gonorrhoic ophthalmia, Bader obtained good results by the use of a salve consisting of one grain of red precipitate and one-fifth of a grain of atropine, to an ounce of vaseline.

Simi (*Sulla Ottalmia Purulenta Provocata come un Mezzo Terapeutico.* Bell. d' Ocul., vol. v. 3, November, 1882,) favors *the inoculation of blennorrhoic pus in cases of pannus.* In a view of the excellent result frequently obtained, so powerful a remedy should not be simply discarded. The danger to the cornea from blennorrhœa seems the less to the author, the denser the pannus which protects the healthy parts of the cornea like a coat of mail at the height of the inflammation. If jequirity should meet expectations, he would, of course, prefer it, as the intensity of the inflammation could be regulated.

Dianoux (*De l' Ophthalmie Purulente Provoquée comme Moyen Therapeutique.* Le Prog. Med., 1882, Nos. 41 and 43,) reports two cases of *granular pannus, and one of total sclerosis of the cornea, which were cured by the inoculation of blennorrhoic pus.* In the latter case improvement was very moderate. Dianoux hopes to produce a milder form of blennorrhœa by inoculation with Neisser's cultivated micrococci, and believes that obstinate cases of trachoma with intact cornea could be cured by such an inoculation.

L' Oftalmia Purulenta Artificiale Prodotta dal Jequirity. Boll. d' Ocul., vol. v. 3, Nov., 1882.

Moyne was the first in Italy to make experiments with jequirity. For three days applications were made with an infusion of jequirity (32 pulverized beans to 1,000 grms. of water) to the eyes of three children suffering from trachoma, who had been treated for four months with nitrate of silver and tannine without much success. In one case there was considerable reaction; the lids swelled, the cornea became slightly hazy, and on the fifth day purulent secretion set in. This state of affairs soon ended, and on the twentieth day all the symptoms, as well as the trachoma, had disappeared. In the other two children the inflammation was much milder, nevertheless the granulation soon disappeared. In all three cases the cornea was not pannous.

Jequirity. Boll. d'Ocul., vol. v., 4, December, 1882.

Simi tried jequirity according to Wecker's method, in two cases of trachoma and pannus. Inflammation set in, as expected, and culminated on the fourth day; on the twelfth day it came to an end. As regards the result, no change could be seen in one patient, one of whose eyes was staphylomatous, and the other partly so, either in the trachoma, which had existed for four years, or in the pannus. In the other patient the granulations had become smaller, while the pannus had not perceptibly diminished, though the patient declared he could see better.

Snell, Ophth. Rev., vol. i., Oct. 1882, p. 346, obtained good results with *boracic acid in purulent catarrhal*, and some kinds of phlyctenular ophthalmia. According to the intensity of the inflammation, he uses a stronger or weaker solution (10–25 grains to the ounce).

Ferguson, Ophth. Rev., vol. i., Nov. 1882, p. 363, recommends *boracic acid in acute catarrhal and purulent ophthalmia.* He uses it thus: After carefully ectropionizing the lid, boracic acid, in the form of an impalpable powder, is dusted upon and then washed off. If the action is too severe, he employs a solution.

Landolt, Arch. d'Ophth., reports in detail on the production of *hydrogen dioxide, its physical and*

chemical properties, its physiological action and its importance as an antiseptic. It acts as such by setting free oxygen in a nascent state, directly destroying the bacteria, and mechanically disintegrating the pathological products, and thus aiding their removal. He recommends it diluted with water, especially in purulent conjunctivitis, old corneal ulcers, and purulent affections of the lachrymal apparatus, in all of which he obtained good results. It produces no pain, and has no injurious influence on the eye, provided the preparation be pure, for controlling which he gives the necessary reactions.

Magnus, Klin. Monatsbl. f. Augenheilk., vol. xx., p. 396, extracted *a bit of glass from the cornea* of the left eye of a lady, which had been *there for two years and three months without causing any marked irritation.*

Pathogénie des Kystes de l'Iris. Leur Production Artificielle par des Greffes de Lambeaux de Cornée sur la Membrane Irienné. Acad. des Scienc., Jan. 15, 1883:

Masse continued his experiments on rabbits for the artificial production of cysts of the iris. He introduced a small piece of cornea, abscised with Beer's knife, into the anterior chamber, where it attached itself to the iris and became opaque and vascular, the blood-vessels coming from the iris; genuine cysts with transparent walls then developed, which undoubtedly grew out of the corneal tissue transplanted upon the iris.

(Basel.) *Un Cas de Tuberculose de la Chorioide, Inoculée dans la Chambre Antérieure de Lapins.* Arch. d'Ophth., vol. ii., No. 6.

Hirsch experimented upon the eyes of rabbits in regard to inoculation masses of the choroid. He enucleated the right eye of a young man of seventeen, without any hereditary taint, which gradually had lost its sight after nutritive disturbances, while a tumor gradually developed to the inward of the cornea, whose nature could not be definitely determined. From this tumor a fistula extended inward to a cavity occupying the greater part of the interior of the eye, the walls of which consisted of a caseous mass, which included the deeper layers of the sclera and most of the choroid, while only the anterior and a small part of the temporal section of the eye was comparatively healthy. This caseous mass was introduced into the anterior chamber of three rabbits, where it produced an eruption of tubercles on the iris after the lapse of twenty-two to thirty-nine days. These tubercles, when used for inoculation, produced the same result after twenty-three days. Unfortunately, the experiments could not be continued, as all the animals perished by an accident. In the inoculated tubercles, neither giant-cells nor tubercle bacilli were found. Nothing abnormal in the thorax or abdomen.

Recherches Microscopiques sur les Ossifications Choriodiennes. Rec. d'Ophth., Dec., 1882.

Hoene gives the microscopical description of two cases of bone-formation in the choroid. Hoene thinks that bone develops in the choroid in embryonic tissue, which is the product of exudation of the choroid. This exudation becomes organized, is changed to connective, and finally to bony tissue. The precise localization, and the relation of the osseous tissue to the choroid, therefore, depend only on the intensity and localization of the inflammatory process.

On Cataract and Other Affections of the Eyes in Persons Struck by Lightning. V. Graef's Arch. f. Ophth., vol. xxviii. 3, p. 255.

Leber reports the case of a sea captain of thirty-one, who had been struck by lightning, burning the skin of the left side of his body down to the thigh, and producing total hemiparesis of that side. After these affections had been cured, cataract developed in both eyes in the course of a few months, in the left more than in the right, while there was also partial atrophy of the optic nerve, mydriasis, paralysis of accommodation of that eye. The result of the operation was comparatively good. Five similar cases of cataract were found in searching through the bibliography, eight cases of amaurosis in pre-ophthalmoscopic times, and periodic amaurosis or amblyopia respectively in four cases, cases, among them the interesting one of Reich, of rupture of the choroid. Generally both eyes are affected, rarely (Sæmisch) only one. The electric discharge is the cause of all these affections, no matter whether lightning strikes the body itself or only passes close to it. The direct physical, chemical, catalytic action of the electric discharge upon the lens is the cause of the cataract.

Benson reports *a case of cholesterine cataract* in a child a year old, whose entire lens was a mass of bright yellow crystals.

CORRESPONDENCE.

Ergot in Convulsions.

EDS. MED. AND SURG. REPORTER:—

In a recent number of the MEDICAL AND SURGICAL REPORTER I noticed a short note from Dr. A. N. Carrigan, Washington, Arkansas, in which he speaks of the good effects of ergot in convulsions; and I wish to add my mite corroborative. Strange indeed, in the discussion referred to, none of the

eminent men present should have alluded to the drug at all, when it exercises such an influence over (almost) all forms of convulsions. In the puerperal variety, my experience with it, in combination sometimes with morphia, has been most satisfactory; and in the convulsions of children, with or without the last-named drug, nothing that I have used has been so reliable. In the latter variety I have never had to give more than two doses hypodermatically, with appropriate after-treatment to restore the patients.

Case after case could be reported to show its efficacy, but will only give the outlines of one. On August 11, 1883, was called in the afternoon to see Emma F., aged three years, and found her in a convulsion, and learned that she had had them every few minutes from about 8 a. m., in a very severe form. As soon as possible I inserted twenty drops fl. ex. ergot in her arm, and in a short time had the satisfaction of seeing an improvement in her condition. Another insertion half an hour afterwards restored her to perfect consciousness, when, after giving necessary medicines for the cause (irritation from worms, and costive bowels), I left, to find her sitting up on my return next day.

Two cases of the puerperal form have been brought to a safe termination with it; one requiring morphia to be added, the other, and seemingly the worst, not. Let others try the remedy, and report their experience. Yours truly,

A. L. PURDOM.

Hickory Creek, Ark., Feb. 18, 1884.

NEWS AND MISCELLANY.

Fortunes Made by Charlatans.

The *Pacific Med. and Surg. Jour.* very wisely says that it is not surprising that crafty men who love money more than virtue and truth, should go into the nostrum trade when they behold the fortunes that are sometimes made by an ingenious mixture of fraud and physic. Most persons have noticed the advertisement of "Dr. Parr's Life Pills," with a cut of the venerable old gentleman, whose association with the pills is as foul a slander on his memory as the cut is a burlesque on his true figure. Those pills were a fabrication of Mr. Ingram, the founder and late proprietor of the *London Illustrated News*, who made his fortune by the fraudulent speculation. Through his wealth thus accumulated he gained a social position in society, and finally procured his election to Parliament. He used to say that having noticed that purchasers generally gave preference to goods advertised with a cut, he took the hint and fabricated a cut of Dr. Parr in connection with the use of his name, and that this proved an element of success in his pill business. We have in California a number of adventurers in the same field who employ the same trick, sometimes varying it by supplying the portrait with their own cheeks. As a rule, this class of advertisers hold the first rank as impostors and put forth the most unblushing falsehoods. We do not know, however, of any one who has succeeded like Mr. Ingram in gaining a foothold in good society. It is not uncommon for men or women of high standing to patronize quacks, despising them at the same time. If they recognize the pretended "doctors" in social life, such men as Li-po-tai would have the run of a number of aristocratic dwellings in San Francisco. The experiment was tried many years ago in Philadelphia by Swaim, the original panacea man, a vulgar and illiterate fellow who made a fortune by his medicine, the prescription for which he had got from a New York physician for his own use. Swaim built a splendid mansion on Chestnut street and invited the aristocracy of the city to a grand ball on the occasion. But the aristocracy did not come, and Swaim's money failed to open to him the doors of his fashionable neighbors. Brandreth and Jayne among others, made fortunes by deceptive advertising, but they never rose in society above the money mark. An itinerant adventurer once told us that whilst traveling on the Mississippi river and being out of employment, he purchased of an apothecary in a Western city all his old stock of purgative pills and retailed them on the steamboats and elsewhere as Brandreth's pills, with the most surprising results. A single dose often cured, and he could have got all the certificates he might want in favor of Brandreth's pills. The foundation of Jayne's fortune was a chronic diarrhœa, which was cured by a prescription of a doctor in New Jersey. Jayne got the prescription, went to Philadelphia, procured the services of an impecunious and smart young graduate in medicine to write up his lying, and as the cholera was approaching, mounted the flood which leads to fortune by flaming advertisements of "Doctor" Jayne's Carminative. Then came Jayne's Expectorant and Jayne's Vermifuge, and so forth, and in a very few years Jayne was able to build one of the costliest edifices in Philadelphia. He became also a celebrated "doctor," though he knew no more of medicine than of Sanscrit when he began his professional career.

Medical Society of the State of Pennsylvania.

The thirty-fifth annual meeting will be held in Philadelphia on Wednesday, Thursday, and Friday, May 14, 15, 16, 1884, commencing on Wednesday, May 14th, at 9 a. m.

Amendment to be acted on, by Dr. H. Leffmann:

No paper shall be read before this Society unless the same shall have been previously read, either in full or in abstract, before a County Society, and by it referred to the State Society.

Appointments for 1884:

To prepare address in Surgery, Dr. John B. Roberts, Philadelphia.

To prepare address in Obstetrics, Dr. Jacob Price, West Chester.

To prepare address in Hygiene, Dr. Benjamin Lee, Philadelphia.

To prepare address in Mental Disorders, Dr. Alice Bennett, Norristown.

To prepare address in Medicine, Dr. W. H. Daly, Pittsburgh.

To prepare address in Ophthalmology, Dr. Wm. S. Little, Philadelphia.

Secretaries of County Medical Societies are earnestly requested to forward *at once* complete lists of their *officers and members*, giving the *post-office address of each.*

Every *delegate*, before admission, shall produce a certificate of delegation, signed by the President or Secretary of his County Society.

Every *permanent member* (*not a delegate*), before admission, shall produce a certificate of good standing in his County Society.—(*Extract from Constitution.*)

WM. B. ATKINSON, M. D.,
Permanent Secretary.

Railroads.—The Pennsylvania Railroad and its branches, and the Philadelphia and Reading Railroad and its branches, will issue excursion tickets at the rate of two cents a mile. All who desire to avail themselves of this should notify the Permanent Secretary, stating the number of excursion orders required, and the railroad over which the party must travel to the place of meeting.

First Aid to the Injured.

One of our funny exchanges gives the following:

1. Bites of all sorts are painful, and if not treated with expedition and skill, they sometimes prove very dangerous. The most common kinds are those received from dogs, mosquitoes and bears. The rarest kinds are trilobites and jacobites.

2. One seldom, if ever, gets a bite when out fishing.

3. If about to be bitten by a dog, while serenading or foraging in a melon patch, immediately take some violent exercise, in order to preserve a good circulation. For instance, run a mile or so without stopping.

4. Never stop running because there is a man with a club apparently chasing the dog—sometimes he is encouraging him.

5. If this does not accelerate the action of the heart, climb the nearest tree.

6. Don't get down again for the purpose of rescuing the sample of your trousers. This is one of the dog's perquisites, and he wants it for his scrap-book.

Paper Towels for Surgical Purposes.

In the surgical dispensary of the Philadelphia Polyclinic, Dr. Roberts has been using, with much satisfaction, Japanese paper handkerchiefs for drying wounds. Sponges are so seldom and with such difficulty perfectly cleansed after being once used, that they are never employed in the clinic. Ordinary cotton or linen towels are much preferable to sponges, which, if dirty, are liable to introduce septic material into wounds. The paper towels, however, answer the same purpose as cotton ones, and are so cheap that they can be thrown away after being used. They cost from $6 to $7.50 a thousand. The cost of washing a large number of ordinary towels is thus avoided. The paper towels are scarcely suitable for drying hands, after washing, unless several towels are used at once, because the large amount of moisture on the hands soon saturates a single towel. For removing blood from wounds, a paper towel is crumpled up into a sort of ball, and then used as a sponge. Such balls absorb blood rapidly. The crude ornamental pictures, in color, on the towels, are of no advantage, nor are they, as far as known, any objection.

Pasteur's Enthusiasm.

The French National Society for the encouragement of Agriculture, at its fifth anniversary banquet recently, presented its annual Cup of Honor to M. Pasteur. In returning thanks, M. Pasteur said he was not insensible to praise, but yet praise troubled him, because it belonged to the things of yesterday, and true science always looked forward to new achievements. "There is a great field still to explore," he added. "How many plagues and diseases are there yet to subdue! But have confidence; new methods are discovered, and methods are the soul of science. The great fact evidenced by our meeting here to night is, the alliance between science and practice. You were the first to believe in the triumph of the experimental method. You have enabled me to carry into the domain of fact what formerly would have remained in the region of hypothesis. Your farms have been, so to say, branch establishments to my laboratory. The faith which animated me you have shared, and you have largely contributed to help me to add to the wealth of France, which has abundantly requited me."

The Gastroscope.

The *Med. Press and Circular* tell us that Mr. J. Leiter, of Vienna, has constructed a singular modification of the microscope, to which the name of gastroscope has been given. Its use is for exploring the interior of the stomach. It consists of a metal tube, 65 cm. long and 15 mm. thick, bent at an angle of 150° at about one-fourth of its length from the lower end. At the lower extremity is contained an incandescent electric lamp for illumination of the interior of the stomach and an objective, at the back of which is a prism to reflect the pencil along the length of the tube; at the bend it is again reflected by another prism to the eye-piece. Provision is made for a circulation of cold water to prevent the lower end of the tube becoming inconveniently hot.

Physicians as Sanitarians.

A Washington (D. C.) physician had a suit brought against him for $1,000 damages for failing to take the proper measures for preventing the spread of a contagious disease in the family of the complainant. A contemporary raises the question as to whether it is the function of the physician to prevent disease, and says that if it is, he should certainly be remunerated for such service. With this view, we are entirely in accord. A physician is undoubtedly called upon to do all in his power to stay the progress of contagious disease, but he should also make charges for such services, and be enabled to collect such charges.

Correction.

The inventor of the scrotal compressor described in the REPORTER recently, is Dr. G. Miliano, 207 East 13th street, New York, not *Miliaro*, as the types made us say.

—The "Proceelings of the Medical Society of Kings county, N. Y.," has suspended publication after eight years of existence.

OBITUARY NOTICES.

DR. CHARLES L. MARTIN,

Of Allentown, Pa., died November 26, 1883, of cerebral effusion. He was in his sixty-fourth year, and was graduated at the University of Pennsylvania in 1841. The whole of his professional life was passed in Allentown, where he enjoyed an extensive practice.

Items.

—The President has appointed Surgeon Gunnell to succeed Surgeon-General Wales as Surgeon-General and Chief of the Bureau of Medicine and Surgery of the Navy.

—A Spanish medical journal states that there has been born in Madrid an infant with neither arms nor legs. In other respects it is well formed and healthy, and is now five months old.

—A bill has been passed by the New York Legisture appropriating $50,000 for the enforcement of the act designed to stamp out pleuro-pneumonia and other contagious diseases among the cattle in that State.

—It is reported that owing to the fire which destroyed the establishment of Powers & Weightman, together with large quantities of Peruvian bark, there will be a rise in the price of quinine amounting to about fifty cents.

—By the addition of ten parts of collodion to fifteen of creasote (says the *Revue de Thérap.*) a sort of jelly is obtained which is more convenient to apply to decayed teeth than is creasote in its liquid form.

—The *American Druggist* says that the clinical thermometer was used and commended by Antonius De Haen one hundred and twenty-nine years ago. Its re-introduction occurred fifteen or eighteen years ago.

—The International Otological Congress will be held at Basle, September 1, 2, 3, and 4, 1884. The titles of communications intended to be made to the Congress should be made known to Dr. Burckhardt-Mérion, of Basle, before the 15th of May.

—Under the supervision of Dr. Rush Huidekoper, several specimens are being prepared in the new Veterinary College of the University of Pennsylvania. This work is preparatory to the formal opening of the new department in the early fall.

—Surgeons J. S. Billings and J. S. Brown, U. S. A., have been detailed to attend the International Health Exhibition which meets at South Kensington in May next, and to represent the Department at the International Medical Congress which will convene at Copenhagen in August next.

—It is said that the tooth manufacture of the United States amounts to 10,000,000 teeth per annum. There are twelve manufactories, but one of them, founded in 1864, makes half the number. The value of these teeth is a million dollars. The materials of which they are composed are feldspar, kaolin, and rock crystal.

—The daily press reports 542 suicides for 1883 in Paris, a gain of sixty-three over 1882. The choice of means of death shows that hanging is not as popular as it is in England, for while only eighty-one hung themselves, 217 used firearms, and 148 drowned themselves. By thirty-seven, the more scientific expedient of burning charcoal in closed rooms was adopted.

—The Meharry Medical Department of the Central Tennessee College, in Nashville, has just graduated eight colored physicians. Thirty-five young negro men had previously been graduated from this school, and it is stated that they have been successful in their work, and have been well received and aided by the resident white physicians.

—The turf surrounding the mansion of Mrs. A. T. Stewart, on Fifth Avenue, New York, is said to have been taken from the grounds of the old New York Hospital, at Broadway and Pearl street, and to be about one hundred years old. When the hospital buildings were torn down some years ago, Mr. Stewart purchased the sod from the Governors, and had it relaid about his new house, which was then in course of erection.

—According to Dr. Sach, of Buenos Ayres, in the *Popular Science Monthly*, there is no danger of an exhaustion of the quinine supply. The experimental plantation in Java and the Island of Reunion have been very successful, and besides these nurseries, the trees have been cultivated in Bolivia by the million for ten years. At three places in the last-named country, taken as they come, the number of trees growing is given severally at 70,000, 20,000, and 3,500,000.

QUERIES AND REPLIES.

EDS. MED. AND SURG. REP.—

In reply to "Medica" in your issue of the 23d ult., I would say to his first query that his patient has a "lacerated cervix," which can be remedied by an operation. Then cease giving the so-called "emmenagogues" and "tonics" for awhile, and put her upon some good emulsion of cod liver oil, say Phillips' palatable emulsion, as a restorative.

To his second query: Use astringent suppositories.

R. L. M.

Anæsthetics in Labor.

EDS. MED. AND SURG. REP.—

I shall be greatly indebted to you for any information you may be pleased to give me on the following points in relation to *anæsthetics in labor:*

1. What is the best anæsthetic for such cases?

2. What is the effect of chloral hydrate administered previous to the anæsthetic?

3. Do you find that it arrests the uterine contractions so as to retard delivery?

4. What effect, if any, does it have on the child, either before or after delivery?

5. Does it have any tendency towards the production of post-partum hemorrhage?

Any other information of interest not covered by these queries will be gladly received.

To those sending replies, I shall be pleased to send a reprint of the report on this topic.

W. E. ZIEGENFUSS, M. D.

Albany, Wisconsin, February 29, 1884.

Dr. V. G., of Mexico, wishes suggestions in a case of hypochondria in a man of middle age, without obvious lesion.